



Energy for
generations

WORKING TOGETHER

Annual Report and Financial Statements 2016

esb.ie





WORKING TOGETHER

ESB is making a stand for Ireland's future today; a future powered by clean, sustainable electricity. ESB is committed to finding the best route to a low-carbon future, one that protects its customers and the economy by maintaining energy security and affordability. This means investing in new, renewable forms of generation; empowering customers to take more control over their energy use; and expanding and enhancing the grid to accommodate more distributed energy resources. Most importantly, it means working with a wide spectrum of partners from business, academic and community group backgrounds to accelerate the pace of change and to bring customers on a journey to a more sustainable future. ESB believes that by working together, marvellous things are possible.



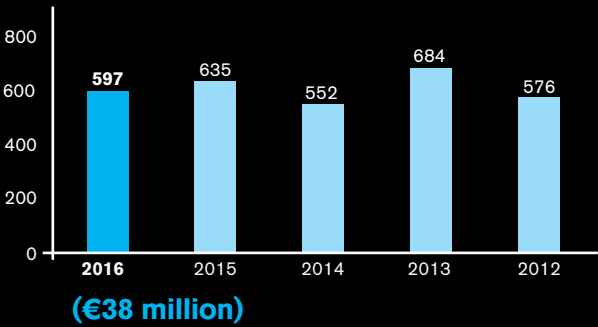
ESB was established in 1927 as a statutory body in the Republic of Ireland under the Electricity (Supply) Act 1927. With a holding of 95%, ESB is majority owned by the Irish Government. The remaining 5% is held by the trustees of an Employee Share Ownership Plan. As a Strong, Diversified, Vertically Integrated Utility, ESB operates right across the electricity market: from generation, through transmission and distribution to supply of customers, with an expanding presence in the Great Britain generation market. In addition, we extract further value at certain points along this chain; supplying gas, using our networks to carry fibre for telecommunications and more. ESB is a leading Irish utility with a regulated asset base (RAB) of approximately €9 billion, 47% of generation in the all-island market and as a supplier of electricity to approximately 1.4 million customers throughout the island of Ireland. ESB will continue to grow the scale of its generation, trading and supply businesses so that it can compete within the all-islands competitive environment. ESB is focused on providing excellent customer service and maintaining its financial strength. As at 31 December 2016, ESB employed approximately 7,600 people.

ESB was established in 1927 as a statutory body in the Republic of Ireland under the Electricity (Supply) Act 1927. With a holding of 95%, ESB is majority owned by the Irish Government. The remaining 5% is held by the trustees of an Employee Share Ownership Plan. As a Strong, Diversified, Vertically Integrated Utility, ESB operates right across the electricity market: from generation, through transmission and distribution to supply of customers, with an expanding presence in the Great Britain generation market. In addition, we extract further value at certain points along this chain; supplying gas, using our networks to carry fibre for telecommunications and more. ESB is a leading Irish utility with a regulated asset base (RAB) of approximately €9 billion, 47% of generation in the all-island market and as a supplier of electricity to approximately 1.4 million customers throughout the island of Ireland. ESB will continue to grow the scale of its generation, trading and supply businesses so that it can compete within the all-islands competitive environment. ESB is focused on providing excellent customer service and maintaining its financial strength. As at 31 December 2016, ESB employed approximately 7,600 people.



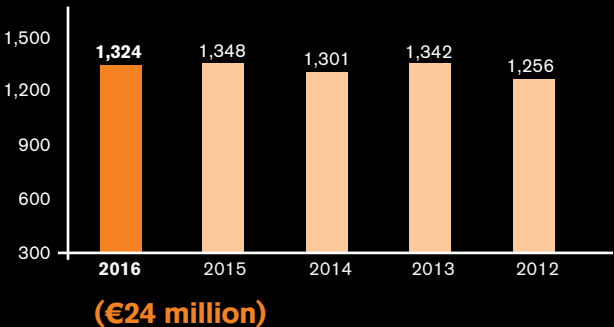
KEY FACTS AND FIGURES

OPERATING PROFIT* €'M

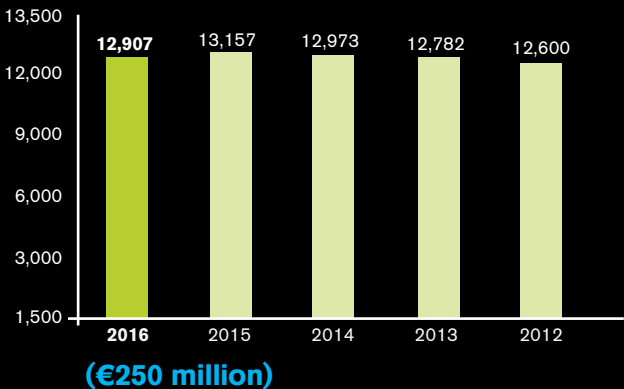


* Before exceptional items. See Financial Review page 38.

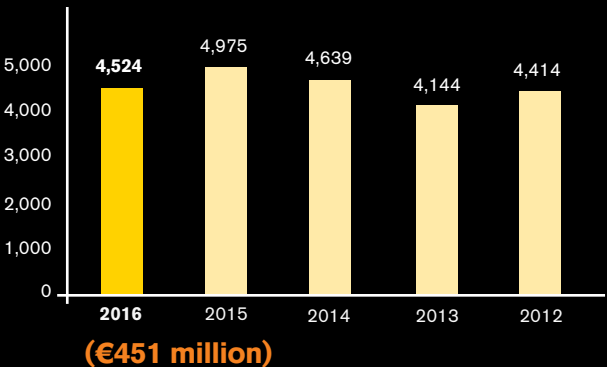
EBITDA* €'M



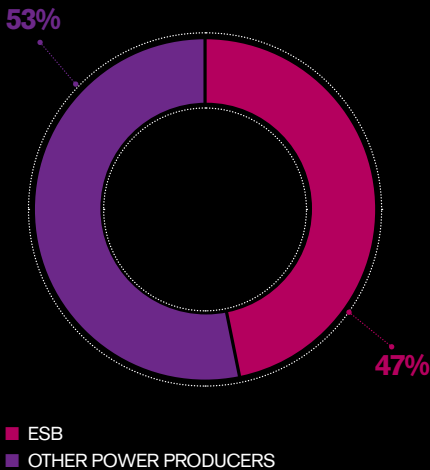
TOTAL ASSETS €'M



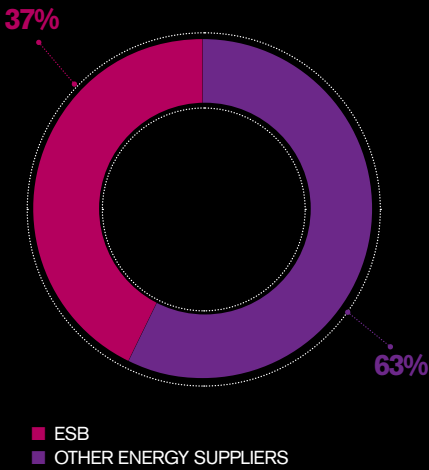
NET DEBT €'M



GENERATION ALL-ISLAND
MARKET SHARE



SUPPLY ALL-ISLAND
MARKET SHARE



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Highlights

"The Honeywell control system has helped me control energy costs in my home. The app is great when I am out of the house and I can turn the heat on earlier on cold evenings when I am on my way home from work. ESB continues to explore new products and services to help our customers reduce their energy costs and I am happy to be a part of this worthwhile drive to improve energy efficiency."

Sandra Ryan
Business Service Centre



CHAIRMAN'S STATEMENT

OVERVIEW

I am pleased to present the annual report and financial statements for ESB for 2016. As Chairman of ESB, I am proud of ESB's long tradition of delivering value to customers and supporting economic growth and social development in the communities we serve. As we mark during 2017 the 90th anniversary of the establishment of ESB, we will maintain and renew this focus on customer service and stakeholder engagement.

2016 has been a positive year for ESB with reported operating profit and profit after tax of €597 million and €186 million respectively. This performance equates to a return on capital employed (ROCE) of 6.1% and enables ESB to pay a dividend of €116 million for 2016.

Profits reflect strong operational performance in all areas, notwithstanding intense competition across all our markets.

ESB's diversified businesses and solid financial position ensures it is well positioned to meet the challenges that lie ahead and remain at the forefront of the energy sector in an all-islands market.

STRATEGIC FOCUS ON A LOW-CARBON FUTURE

The Board undertook a review of ESB's Group Strategy to 2025 which reaffirmed ESB's strategic priorities and the overall direction of the business. The review emphasised the need for ongoing innovation and investment to support the transition to a low-carbon future.

COMPETITIVE OPERATING ENVIRONMENT

Competition remains intense across all our markets. In response to increased residential competition in the Irish market in recent years, Electric Ireland has introduced a new enduring reward product for its loyal electricity and gas customers. Electric Ireland has also expanded its business in Northern Ireland (NI). Developing revenue streams through customer based solutions and expansion into new markets will remain a priority in the coming years.

STRONG PERFORMANCE IN ALL AREAS

2016 was characterised by excellent generation fleet availability, which together with the successful commissioning of the Carrington Plant, an 885 MW combined cycle gas turbine (CCGT) near Manchester, contributed to the successful commercial performance of our generation assets. ESB Networks and Northern Ireland Electricity Networks (NIE Networks) delivered significant network improvements under their respective regulatory frameworks to enhance resilience and support a further increase in renewable generation.

DIVIDEND

In line with ESB's dividend policy, the Board is recommending a final dividend of €60 million in respect of 2016, which will bring the total amount for 2016 to €116 million and to almost €1.5

billion in the past decade. Our dividend policy provides for targeted dividends of 38% of profit in 2016 and 40% in 2017 and thereafter.

UPHOLDING STANDARDS IN CORPORATE GOVERNANCE

The Board is committed to the highest standards of corporate governance to manage risk and support sustainability and growth. ESB has put in place measures to comply with the Code of Practice for the Governance of State Bodies (2009), an agreed Government framework. The Department of Public Expenditure and Reform issued a revised Code of Practice for the Governance of State Bodies in August 2016. This revised Code will apply in ESB's case for the financial year to 31 December 2017. In addition, ESB complies on a voluntary basis, with the UK Corporate Governance Code and the Irish Corporate Governance Annex.

The Board formally reviews the Group's principal risks annually as part of its ongoing review of risk, to ensure that appropriate controls are in place and that risks are being proactively managed.

Paul Lynam and Alf Smiddy joined the Board this year. I welcome them both to the Board and look forward to working together. Séamus Mallon's second term in office expired in May 2016 and I would like to thank him for his valuable contribution to ESB over the years.

EXTERNAL AUDITOR

The Board has been keeping developments at EU level with regard to audit tenure under close review. Taking account of these developments and market practice with regard to auditor rotation in the Republic of Ireland (ROI) and the United Kingdom (UK), a decision was taken to seek Ministerial approval to appoint a new external auditor. Following the completion of a competitive tender process during 2016, PwC was appointed as ESB's next external auditor from 2017. KPMG, the current auditor, did not participate in the process.

The audit of the 2016 annual report and financial statements will be the last one conducted by KPMG and I would like to express my appreciation to the partners and employees of KPMG who have worked on the ESB audit over the years for their excellent service.

INCIDENT AND INJURY-FREE ENVIRONMENT

ESB's safety performance in 2016 was underpinned by ongoing investment in safety processes, systems and capability and an emphasis on developing an incident and injury-free culture across the organisation. ESB is fully committed to the goal of an incident and injury-free workplace. To that end, comprehensive safety plans and processes are in place throughout the Group supported by the necessary safety management information systems.

PEOPLE SUPPORTING EXCELLENCE

ESB continues to support diversity in all forms. Having a diverse work environment plays an increasingly important role in ESB's ability to attract, retain and develop key skills and talents. It also drives better insight and understanding of customers, leading to better innovations. In 2016, in support of our corporate growth and innovation strategy, ESB recruited 84 new graduates and 76 new apprentices. The fact that Ireland has one of the most advanced electricity systems in the world is in no small part due to the expertise and commitment of ESB employees. I would like to take this opportunity to thank them for their huge contribution to the Group in 2016.

Since its foundation in 1927, ESB has had a strong sense of corporate social responsibility. In 2016, over €2 million was disbursed across a range of community and issues-based initiatives.

ESB encourages and facilitates volunteering by its employees in their local communities and in support of ESB Corporate Responsibility Programmes.

LOW-CARBON FUTURE

Energy is vital to every aspect of economic and social life and therefore subject to stakeholder scrutiny. The complexity and uncertainty facing the energy sector presents major challenges in the form of disruptive technologies and new competitive pressures. ESB continues to show leadership by prioritising the best long-term interests of our customers and society in general.

The Board is committed to ensuring that the approach taken by ESB is both sustainable and socially responsible. The strategy review undertaken in 2016 reaffirms the Board's belief that ESB's Group Strategy to 2025 is the right path to take, and will ensure that ESB remains at the forefront of the energy sector in an all-islands market.

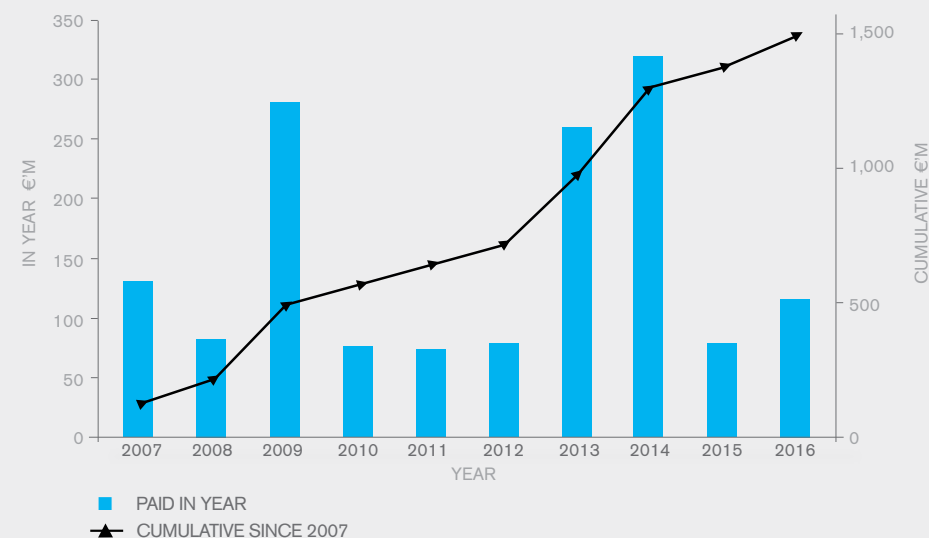
CONCLUSION

In accordance with the provisions of the Electricity (Supply) Acts 1927–2004, the Board presents the annual report and financial statements for the year ended 31 December 2016.

Ellvena Graham

Ellvena Graham,
Chairman
22 February 2017

DIVIDENDS 2007 TO 2016



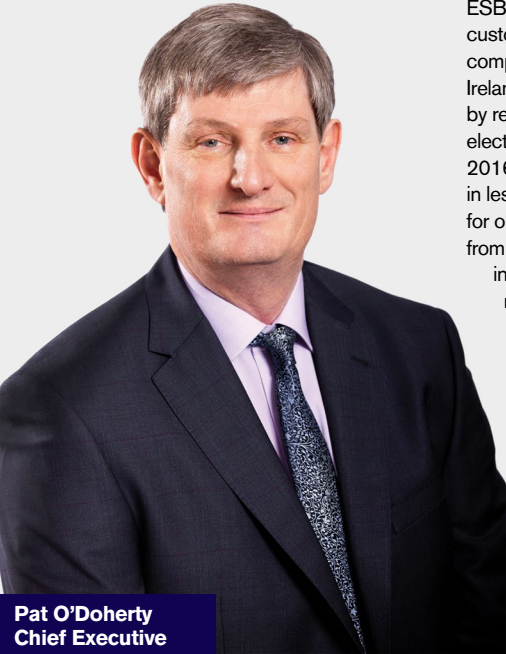
Ellvena Graham
Chairman

CHIEF EXECUTIVE’S REVIEW

PERFORMANCE IN 2016

2016 was characterised by strong operational performance across all areas of the business, which resulted in an operating profit of €597 million. The successful operation of the new Carrington Plant in 2016 along with excellent plant availability at 93%, resulted in strong performance from the Generation and Wholesale Markets (G&WM) business notwithstanding its challenging operating environment. The networks businesses continued to successfully deliver significant capital and maintenance programmes in accordance with their regulatory contracts, and Electric Ireland, ESB’s retail arm, delivered solid financial performance while maintaining its strong focus on customer service and providing value for all its customers.

This healthy financial performance has enabled ESB to invest €897 million in energy infrastructure during 2016 and to pay a dividend of €116 million bringing total dividends paid over the past 10 years to almost €1.5 billion.



Pat O'Doherty
Chief Executive

2016 OPERATING HIGHLIGHTS
■ The commissioning of the Carrington Plant, an 885 MW combined cycle gas turbine (CCGT) near Manchester
■ Bringing high-speed fibre broadband access to over 50,000 premises in towns around Ireland
■ Electricity standard unit prices for residential customers reduced by 6% and gas unit prices for residential customers reduced by 5%
■ The completion of three new substations in the South West of Ireland to directly support new renewable generation on the system
■ Chambers Ireland Outstanding Achievement in Corporate Social Responsibility Award 2016
■ Installation of over 1,200 kW of rooftop solar panels with Kingspan

CUSTOMER-BASED INNOVATION

ESB innovates to deliver value to our customers and continues to focus on competitive pricing. During 2016, Electric Ireland passed on savings to our customers by reducing standard unit rates for residential electricity customers by 6% from 1 June 2016, the third electricity price decrease in less than two years. Gas unit prices for our customers were reduced by 5% from 1 October 2016, the third reduction in residential gas prices in the last 18 months. Electric Ireland was also first to market a new enduring reward product for our loyal customers, which has been widely welcomed. We continue to focus on customer empowerment and self-service in both Electric Ireland and ESB Networks through new digital service offerings, including a new mobile accessible switching application and new online customer service channels.

DEVELOPING THE WORKFORCE OF THE FUTURE

In a competitive employment market, maintaining the capability and sustainability of our skilled workforce is a priority. 2016 saw ongoing investment in training and development and targeted recruitment to build the skills necessary to deliver value to our customers in a highly competitive and rapidly changing environment.

In support of ESB’s objectives of business growth and renewal, the focus for 2016 was on embedding the new employment model introduced in 2015 and renewal of the workforce. For ESB, this maintains the sustainability and integrity of a market-based and future-focused pay model and for employees, it delivers positive pay movement and significant opportunities for career development into the future. We are also committed to a diverse and inclusive work environment for all our employees.

RESPONDING TO EXTERNAL MARKET FORCES

Several major forces are driving change in the energy sector, notably climate change, technology enabled customers and market integration. ESB has a track record in adapting to change, and is taking steps to respond in all areas, including growing our generation portfolio, working with partners to accelerate our transition to a low-carbon future and offering new energy services to customers to help them use energy more efficiently. Through our structured innovation programme, we are sourcing and developing new ideas, and during 2016 we developed strategic road maps to develop customer based solutions in several key areas including smart networks, electrification of heat, transport and big data.

TRANSITIONING TO A LOW-CARBON FUTURE

Reducing the carbon intensity of our operations while maintaining energy affordability and security of supply for customers is a priority for ESB. In this context, we are focusing on four areas: investing in renewable and low-carbon generation; developing the electricity network to support more distributed energy resources; empowering our customers to take more control over their energy use and supporting the electrification of heat and transport to drive the wider decarbonisation of society.

During 2016, our shift towards renewable generation continued with the commissioning of Raheenleagh Wind Farm, a 35 MW wind farm in County Wicklow and the installation of over 1,200 kW of rooftop solar panels through our joint venture with Kingspan. Five more wind farms are currently under construction and our waste wood to energy plant (a joint venture with the UK’s Green Investment Bank and Scandinavian equipment suppliers BWSC and AET) at Tilbury Port in Essex, United Kingdom (UK) is nearing completion. The growth of renewables on the island of Ireland would not be possible without the significant investment in our networks by ESB Networks and Northern Ireland Electricity Networks (NIE Networks). Total capital expenditure in the two networks’ businesses in 2016 was over €500 million to meet current and future demands of all electricity customers. ESB is also supporting the roll-out of high speed

broadband to homes and businesses throughout the country. Meanwhile, Electric Ireland has achieved its 2016 energy efficiency targets and continues to develop solutions to help customers reduce their carbon footprint.

PREPARING FOR MARKET INTEGRATION

The integration of the UK and Irish energy markets offers significant opportunities for ESB to grow its business in a much larger market. The strong performance of the Carrington Plant since it was commissioned in September 2016 enhances ESB’s ability to compete in the UK, and represents potential for further growth in our generation business. The planned change from the current Single Electricity Market (SEM) to a future Integrated SEM (I-SEM) presents uncertainty and increased complexity, but ESB is well placed to respond to this. Similarly, the ongoing market reforms in Great Britain (GB) present both challenges and opportunities.

While Brexit creates uncertainty, the UK energy sector continues to provide a pipeline of growth opportunities and ESB continues to monitor the current and emerging Brexit related impacts as these become apparent.

SAFETY REMAINS A CORE VALUE

Safety is a core value for ESB and we are working to ensure the safety of our employees, contractors and the general public. A new public safety campaign, Stay Safe, Stay Clear, was launched in 2016 by ESB Networks, which has succeeded in raising public awareness of how to stay safe around electricity wires. Internally, the new safety organisation established in 2015 is impacting positively on safety culture across the Group.

WORKING TOGETHER

Collaboration is central to our strategy, as it drives innovation and provides additional resources for new investments. We are partnering with numerous start-ups, academic institutions and multi-national companies across all areas of our business, such as Kingspan and Terra Solar on solar projects, Vodafone on fibre-to-the-building and Endeco on fast frequency response solutions. The proposed redevelopment of the Fitzwilliam Street Head Office complex is planned to commence in 2017. Working in collaboration

with others, ESB is committed to setting the standard for a modern, sustainable office space in Dublin city with a design that is respectful to its history, sensitive to its surroundings and representative of its time.

SUPPORTING COMMUNITIES

Over the past decade, ESB has awarded over €10 million to community-based projects in the Republic of Ireland (ROI) and Northern Ireland (NI) in the areas of suicide prevention, education and homelessness through our Energy for Generations Fund. We also invest in communities through sponsorships to promote science, technology, engineering and maths as well as sport, arts and cultural initiatives.

ESB was delighted to receive the Chambers Ireland Outstanding Achievement in Corporate Social Responsibility (CSR) Award 2016 for having CSR practices embedded at the core of our business and for our ongoing dedication to community engagement and responsible business practice.

LOOKING AHEAD TO 2017 AND BEYOND

Climate change is one of the biggest challenges facing humanity, and ESB, as Ireland’s leading energy company, is conscious of our responsibility to reduce carbon emissions. Our challenge is to bring customers with us on that journey by finding solutions that maintain energy security and affordability, and developing products and services that directly respond to their needs. 2017 marks the 90th anniversary of ESB, and we will be marking that milestone by planning ahead to our 100th anniversary and beyond, working towards a low-carbon future powered by clean electricity.

Pat O'Doherty,
Chief Executive
22 February 2017

ESB AT A GLANCE



BUSINESS SEGMENT	GENERATION AND WHOLESALE MARKETS (G&WM)	ESB NETWORKS	NORTHERN IRELAND ELECTRICITY NETWORKS (NIE NETWORKS)	ELECTRIC IRELAND	OTHER SEGMENTS
DESCRIPTION	ELECTRICITY GENERATION	ELECTRICITY TRANSMISSION AND DISTRIBUTION		ELECTRICITY SUPPLY	INNOVATION AND INTERNAL SERVICE PROVIDERS
REVENUE	€1,327M	€1,019M	€272M	€1,895M	€278M
OPERATING PROFIT	€231M	€314M	€35M	€72M	(€55M)
CAPITAL EXPENDITURE	€262M	€373M	€141M	€8M	€113M
AVERAGE EMPLOYEE NUMBERS	981	3,289	1,261	365	1,701
LINK TO OTHER SECTIONS IN THIS REPORT	See page 44 G&WM Operational Review	See page 46 ESB Networks Operational Review	See page 48 NIE Networks Operational Review	See page 50 Electric Ireland Operational Review	See page 52 Innovation Operational Review

HIGHLIGHTS

FINANCIAL

■ EBITDA
■ OPERATING PROFIT

€1,324 million

€597 million

OPERATIONAL

COMMERCIAL OPERATION OF CARRINGTON

885 MW CCGT IN MANCHESTER, UK

OVER 26,000 NEW CUSTOMER CONNECTIONS

CUSTOMER AND MARKET

GENERATION MARKET SHARE 47%

SUPPLY MARKET SHARE 37%

6% PRICE REDUCTION TO RESIDENTIAL ELECTRICITY CUSTOMERS - THIRD PRICE DECREASE IN LESS THAN TWO YEARS

5% PRICE REDUCTION TO RESIDENTIAL GAS CUSTOMERS - THIRD PRICE DECREASE IN THE LAST EIGHTEEN MONTHS

LAUNCH OF SMART ENERGY SERVICES

CORPORATE SOCIAL RESPONSIBILITY

STAY SAFE, STAY CLEAR LAUNCH OF CAMPAIGN

THE ENERGY FOR GENERATIONS FUND DISTRIBUTED OVER €10 MILLION IN THE PAST DECADE TO COMMUNITY BASED INITIATIVES IN IRELAND

ELECTRIC AID CONTRIBUTED OVER €1 MILLION IN 2016 TO DEVELOPMENT AND RELIEF PROJECTS IN DEVELOPING COUNTRIES

OVER 30,000 VOLUNTEER HOURS HAVE BEEN RECORDED BY EMPLOYEES

RETURN ON CAPITAL EMPLOYED

6.1%

CONTRIBUTION TO THE IRISH ECONOMY OVER

€2 BILLION

TOTAL DIVIDENDS PAID IN THE PAST DECADE OF ALMOST

€1.5 BILLION

SIRO

- BRINGING HIGH SPEED BROADBAND ACCESS TO OVER 50,000 PREMISES AROUND IRELAND

INSTALLATION OF OVER 1,200 kW OF ROOFTOP SOLAR PANELS WITH KINGSPAN

BUSINESS MODEL, RISK REPORT,
STRATEGY AND KEY PERFORMANCE
INDICATORS (KPIs)

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Business Model

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Key Performance
Indicators (KPIs)

BUSINESS MODEL

ESB operates its business model right across the electricity market from generation, through transmission and distribution to supply of customers, with an expanding presence in the Great Britain (GB) generation market. The business model revolves around improving these businesses and developing new business opportunities across the Group that will help us create further value and transition ESB to a low-carbon future.

BUSINESS ENVIRONMENT

- Climate and Energy Policy
- Ireland's Path to a Low-Carbon Energy System and the Role of Electrification
- Demand, Transformation and Innovation
- Brexit
- Financial Strength

See page 24 for Business Environment

PRINCIPAL RISKS 2016

FINANCIAL

- Energy Trading
- Financial Performance
- Carrington Commercialisation

REGULATORY

- Regulatory Outcomes
- Reputation

OPERATIONAL

- Health and Safety
- Networks Infrastructure Failure
- Generation Plant Availability
- IT Failure
- Data Loss

STRATEGIC

- Disruptive Market / Technology, Competitors
- Organisational Capability
- Industrial Relations Environment
- Legal Risk
- Strategy Execution

See page 18 for Risk Report and Principal Risks

DETAILED BELOW ARE THE MAIN CAPITALS THAT ESB USES IN ITS BUSINESS ACTIVITIES TO CREATE VALUE FOR THE GROUP AND ITS STAKEHOLDERS

TYPES OF CAPITAL

1. MANUFACTURED CAPITAL

- To generate and provide energy in a safe and reliable manner
- 5,727 MW of generation capacity
- Over 180,000 kilometres of electricity network in the Republic of Ireland (ROI)
- Over 49,000 kilometres of electricity network in Northern Ireland (NI)

2. FINANCIAL CAPITAL

- To create value for our key stakeholders
- BBB+ credit rating
- €12.9 billion total assets
- 51% gearing
- Liquidity of €1.7 billion

3. INTELLECTUAL CAPITAL

- To create value by continuing to innovate
- Innovation generating and implementing new solutions
- Promotion of innovation
- Corporate governance structure
- Project management systems and skills
- To date almost €140 million invested by Novusmodus Fund

4. HUMAN CAPITAL

- A workforce that is engaged and agile
- Almost 7,600 employees
- Safety Leadership Strategy
- Employee development programmes
- Safety Culture Change Programme

5. SOCIAL AND RELATIONSHIP CAPITAL

- To create a relationship based on trust with our key stakeholders
- 1.4 million customers
- Over 30,000 hours recorded on volunteering programmes
- Over €10 million distributed to community initiatives over the last decade
- Annual contribution to ElectricAid of circa €1 million
- Working in collaboration with other companies

6. NATURAL CAPITAL

- Bringing sustainable and competitive energy solutions to all our customers
- 422 MW of renewable generation assets

BUSINESS ACTIVITIES

Generation and Wholesale Markets (G&WM)

- See page 44 for G&WM Operating Review
- G&WM comprises ESB's generation, trading and asset development activities in ROI, NI and GB.

ESB Networks

- See page 46 for ESB Networks Operating Review
- ESB Networks manages the electricity transmission and distribution system network in ROI and operates the electricity distribution system network in ROI.

Northern Ireland Electricity Networks (NIE Networks)

- See page 48 for NIE Networks Operating Review
- NIE Networks manages the electricity transmission and distribution system network in NI and operates the electricity distribution system network in NI.

Electric Ireland

- See page 50 for Electric Ireland Operating Review
- Electric Ireland is a leading supplier of electricity and gas to domestic customers in ROI and has a substantial market share in the non-domestic electricity sector in ROI and NI.

Innovation

- See page 52 for Innovation Operating Review and Business Lines
- Innovation works with partners internally and externally to deliver new propositions for customers that support ESB's transition to a low-carbon future.

OUTPUTS

- €1.3 billion EBITDA
- 6.1% return on capital employed (ROCE)
- Contributed over €2 billion to the Irish economy
- Almost €1.5 billion of dividends over the last decade
- 47% of all-island generation market share
- 37% of all-island supply market share
- Maintain over 180,000 kilometres of distribution and transmission network in ROI
- Maintain over 49,000 kilometres of distribution and transmission network in NI
- Almost 4,400 MW of renewable generation connected to the grid on an all-island basis
- Rolled out over 1,200 publicly accessible ecar charge points across the island of Ireland along with 1,700 domestic charge points
- Over 26,000 new customer connections
- Over 300,000 site switches facilitated

STRATEGIC PRIORITIES



A Strong Diversified Vertically Integrated Utility



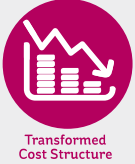
Generation & Supply Businesses of Scale



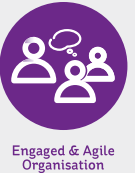
Advanced Networks



Sustainable Innovation



Transformed Cost Structure



Engaged & Agile Organisation

See page 26 for Strategic Priorities

OUR VALUES

Values guide on how we act, make decisions and interact with our stakeholders

FOR SAFETY

INTEGRITY AND RESPECT

RELIABLE AND COMPETITIVE SERVICE

SUSTAINABLE INNOVATION

TEAM-WORK

RISK REPORT

APPROACH TO RISK MANAGEMENT

ESB considers effective risk management to be integral to business operations and essential to the successful achievement of its strategic objectives.

The Board has overall responsibility for risk management and internal control. It has adopted a Risk Management Policy and Governance Framework which outlines its risk management objectives and ensures effective oversight for risk throughout the Group.

The Board delegates responsibility for oversight of specific risks to Board Committees in accordance with Committees' Terms of Reference and their respective areas of expertise. The Board agrees how Committees keep one another and the Board itself informed about risks and risk oversight practices. The Committee chairs provide a report to the full Board on key developments and matters requiring further discussion and consideration. The Audit and Risk Committee retains 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 in its consideration of overall risk appetite, risk tolerance and risk strategy of the Group.

Details of the activities undertaken by the Board and the Audit and Risk Committee during 2016 in respect of their risk responsibilities are outlined on page 74.

Business units are responsible for identifying, assessing and managing their own risks and opportunities. At executive level, the Group Risk Management Committee review principal and emerging risks and ensure the fundamentals of good risk management are incorporated into decision-making at all levels of the Group. The Executive Director Risk Forum, led by the Chief Executive, provide assurance to the Audit and Risk Committee and the Board in relation to the robustness of risk assessments and the progress of plans in place to mitigate risks and pursue opportunities.

IDENTIFYING PRINCIPAL RISKS

ESB identifies its principal risks through an annual bottom-up and top-down approach.

The bottom-up exercise is performed by each business unit. The outputs are fully debated and considered by the Executive Team and senior management teams of each business unit and responsibility is allocated to risk owners for managing each of the principal risks.

The top-down process requires a consolidated view of the Group profile to be developed based on the inputs received from each business unit and the considered views of senior managers in Group-wide functions. External risk trends and drivers also inform the process.

Following detailed consideration by and a recommendation from the Audit and Risk Committee, the Group Risk Plan is submitted for annual approval by the Board.

CONSIDERATIONS FOR RISK IDENTIFICATION

A consolidated view of the Group risk profile is developed based on the following key inputs:

- ESB Group Strategy to 2025
- External business environment
- Risk appetite statements
- Business plans and budgets
- Annual governance and financial control reviews
- Business unit risk reviews
- External risk reviews / assessments (e.g. National Risk Assessment, World Economic Forum Global Risk Review)
- Internal and external auditor perspectives
- External peer research and information exchange
- Meetings with the Risk Management Committee, the Executive Director Risk Forum, the Deputy Chief Executive and the Chief Executive

RESPONSIBILITIES

The Risk Management Policy and Governance Framework explains how the Board, Board Committees and management will meet their respective responsibilities with regard to risk management and internal control.

RISK MANAGEMENT FRAMEWORK

To support the management and oversight of risk across the Group, the Risk Management Policy and Governance Framework requires the establishment and maintenance, to international best practice, of an appropriate risk management framework.

The risk management framework takes an enterprise wide approach and consists of appropriate structures to support risk management, formal assignment of risk responsibilities, procedures and systems for risk identification / assessment / reporting and ongoing monitoring of the effectiveness of risk mitigation actions and controls.

KEY CHANGES IN RISK MANAGEMENT FRAMEWORK IN 2016

- ESB's Risk Management Policy and Governance Framework was updated during 2016. The revised policy includes a number of process improvements, including formalising and clarifying the role of all the Board Committees in overseeing risk. The Policy supports the pursuit of opportunities as an essential mechanism in achieving the long-term success of the Group.
- A suite of guidelines which provide more detailed direction to the business lines in specific areas such as risk assessment and measurement underpin the Risk Management Policy and Governance Framework. Guidelines on Crisis Management and Outsourcing Risk were revised in 2016.
- Introduction of more formal quarterly updates to the Audit and Risk Committee in 2016 to ensure clearer communication of changes in risk profile and progress of mitigation actions.

PRINCIPAL RISKS

ESB's principal risks and uncertainties persisted from 2015 into 2016, although with some movement on the relative ranking of risks and some changes to the risk drivers. The Board approved the principal risks and the detailed Group Risk Plan following consideration and recommendation by the Audit and Risk Committee. The principal risks were included in its risk appetite and mitigation discussions during the year.

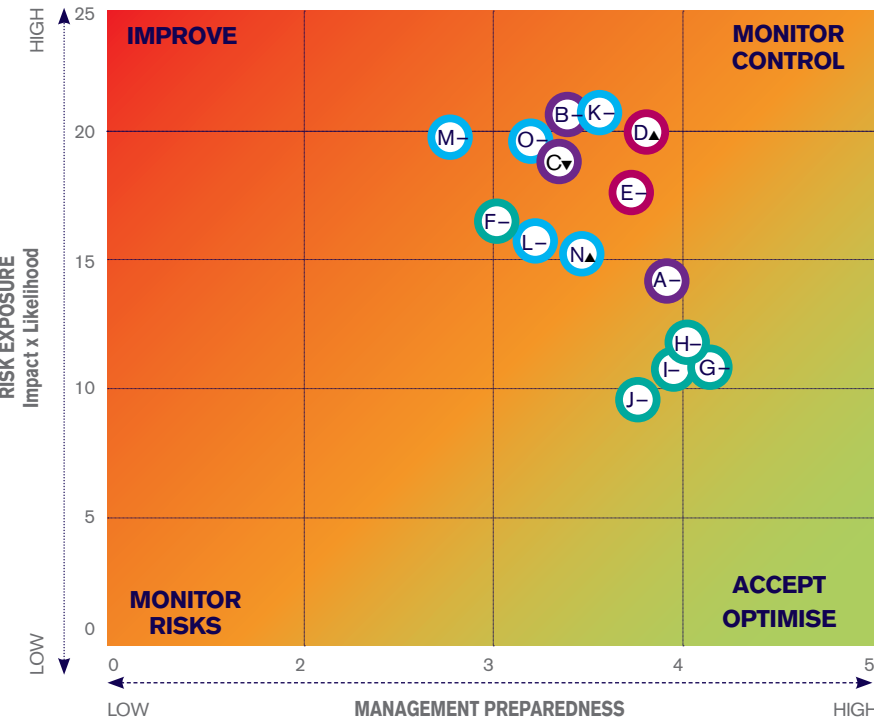
EMERGING RISKS

The risk management framework enables the Group to identify, analyse and manage emerging risks to help identify exposures as early as possible. This is managed as part of the same process to identify the principal risks. These are monitored and reviewed in conjunction with principal risks.

HIGH IMPACT LOW PROBABILITY (HILP) RISKS

As a provider of critical national infrastructure, ESB is acutely aware of the potential impact of this category of risk for the Group. A full review of the HILPs was undertaken in 2016 and approved by the Board.

RISK AND CONTROL HEAT MAP 2016



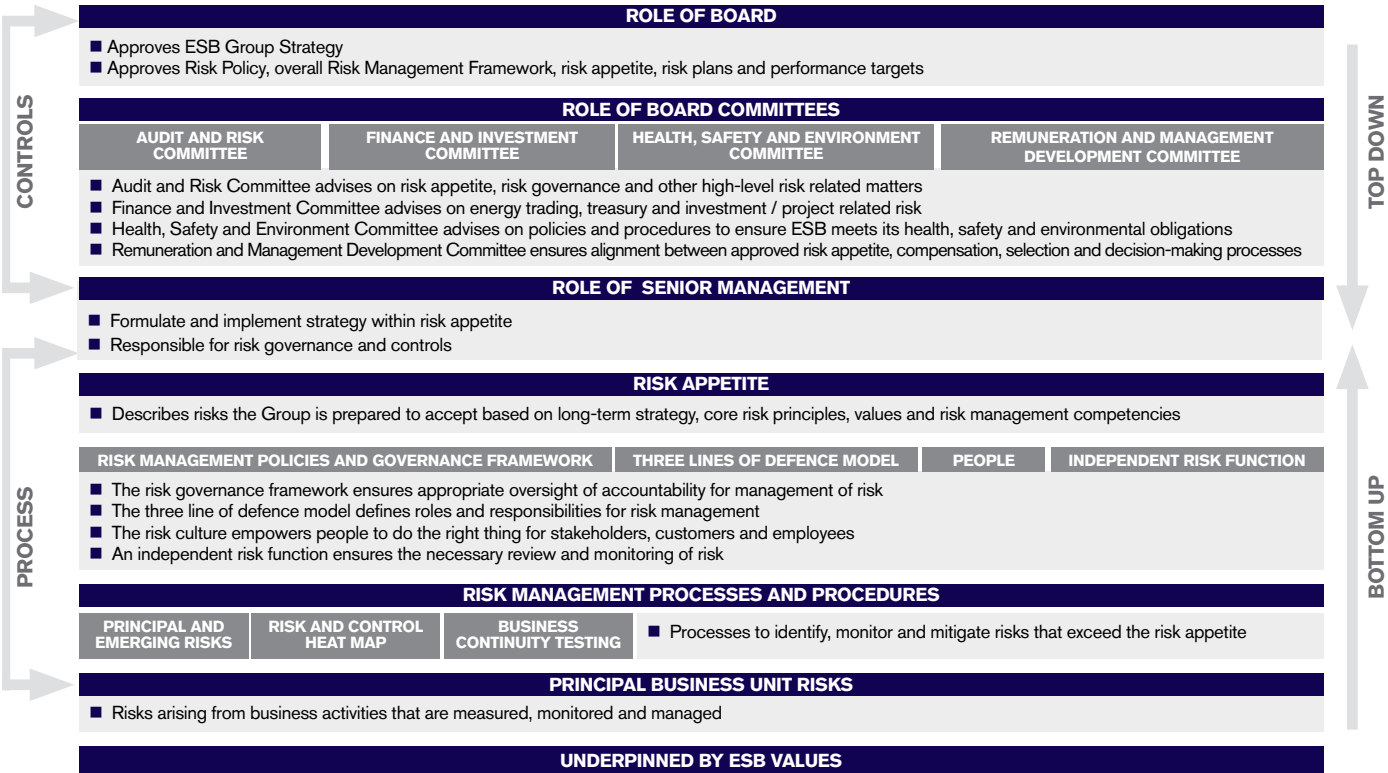
PRINCIPAL RISKS 2016

- Financial**
 - A Energy Trading
 - B Financial Performance
 - C Carrington Commercialisation
- Regulatory**
 - D Regulatory Outcomes
 - E Reputation
- Operational**
 - F Health and Safety
 - G Networks Infrastructure Failure
 - H Generation Plant Availability
 - I IT Failure
 - J Data Loss
- Strategic**
 - K Disruptive Market / Technology, Competitors
 - L Organisational Capability
 - M Industrial Relations Environment
 - N Legal Risk
 - O Strategy Execution

Risk Climate

- ⬆ INCREASE
- ⊖ UNCHANGED
- ⬇ DECREASE

RISK MANAGEMENT FRAMEWORK



PRINCIPAL RISKS AND OPPORTUNITIES

RISK TITLE	STRATEGIC PILLAR	RISK DESCRIPTION	RISK CLIMATE	UPDATE	STRATEGIC RESPONSE
FINANCIAL					
A. Energy Trading		ESB's profits and market share can be affected by adverse movements in energy / commodity prices, or by a material energy trading error.	↔		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Market risk is managed through implementation of appropriate trading and risk management strategies in both generation and supply businesses and implementation of a range of initiatives to increase ESB's access to energy marketsCredit risk is managed through trading only with sufficiently rated entities and ensuring acceptable forms of collateral are in place where requiredOperational risk is managed through continued operation of a trading governance frameworkOngoing review of the risk appetite and the Trading and Risk Management Strategy in light of market developmentsOngoing implementation of controls and mitigations, including investment in systems and training <p>If the risk materialises:</p> <ul style="list-style-type: none">Amend risk appetite and the Trading and Risk Management Strategy in light of market developmentsUndertake investigation into any trading incidentLessons learned reviews
B. Financial Performance		Possibility of a credit rating downgrade as a result of unsatisfactory financial performance making it difficult to secure adequate funding at an appropriate cost in order to finance planned investments and to maintain ESB's liquidity.	↔		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Carry out business planning target setting from the top down using key financial metrics, focused on ESB Group Strategy delivery and protecting financial strengthUse of business and / or technology specific hurdle rates in business investment decisions to ensure capital expenditure is allocated to projects that deliver on both strategic and business performance requirementsContinue to seek cost efficienciesInnovation is tasked with identifying new businesses / technologies to drive future growth opportunitiesOrganise debt investor and shareholder briefings to update on ESB Group Strategy progress and financial positionKeep capital allocation under review across the Group <p>If the risk materialises:</p> <ul style="list-style-type: none">Amend ESB Group Strategy in order to protect financial strengthAddress regulatory challenges through direct engagement with regulatory authorities
C. Carrington Commercialisation		ESB faces a risk that Carrington is not delivered to schedule and / or that when it is delivered, the combination of energy margin and capacity market revenue available in the GB market does not adequately remunerate newly built gas plants.	↓		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Carrington was commissioned in 2016 and the plant was taken over by ESBThe plant is performing well in the marketForward spark spreads have shown some improvement over 2016Carrington was successful in the GB capacity auction for the 2017-18 and 2020-21 periods <p>If the risk materialises:</p> <ul style="list-style-type: none">Review the ESB Group Strategy and assess options in order to protect financial strengthEngage with GB policy makers

RISK TITLE	STRATEGIC PILLAR	RISK DESCRIPTION	RISK CLIMATE	UPDATE	STRATEGIC RESPONSE
REGULATORY					
D. Regulatory Outcomes		The principal regulatory risks faced by the Group come from the evolving EU's internal energy market and climate change obligations, the regulatory approach to price control reviews in the networks businesses and licence and competition law obligations.	↑		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Submissions were made for the Northern Ireland Electricity Networks (NIE Networks) Regulatory Period 6 (2017 - 2024) (RP6), with a draft determination due in March 2017 and final determination due in mid-2017The impact of I-SEM on the wholesale market design is under reviewCost Reduction Directive, a directive on measures designed to minimise cost of deployment of broadband, was effective from 1 July 2016Additional requirements arising from the connection of increased levels of renewables to the Republic of Ireland (ROI) and Northern Ireland (NI) networks <p>If the risk materialises:</p> <ul style="list-style-type: none">Amend capital and operating cost plans to align with regulatory outcomesReport regulatory non-compliance and implement actions to resolve any issuesActivate communications plans to deal with any issues that may arise
E. Reputation		A materialisation of any of the principal risks could materially damage ESB's reputation and brand, causing stakeholders to lose trust in ESB, which could undermine support for ESB's Group Strategy, challenge ESB's ability to secure finance at acceptable rates, compromising ESB's capability to deliver on capital investment programmes and result in a significant loss of customers.	↔		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Pro-actively manage principal risksEngagement with media to facilitate open and clear communicationActively manage regulatory compliancePreparation and implementation of Stakeholder Management Plan <p>If the risk materialises:</p> <ul style="list-style-type: none">Activate Crisis and Stakeholder Management Plans, as appropriate
OPERATIONAL					
F. Health and Safety		Risk of serious injury or death to employees, contractors or the general public.	↔		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Implement public safety awareness campaignsExpedite the roll-out of all elements of the ESB Safety StrategyMaintain accreditation of ESB safety management systems to OHSAS 18001Implement health and safety initiatives based on analysis of safety performanceDeliver health and wellbeing initiatives to support employees' physical and mental wellbeingBusiness continuity planning and testing programme in placeTracking of incidents and good catches by enterprise recording system and reporting by using Key Performance Indicators (KPIs) to highlight performance <p>If the risk materialises:</p> <ul style="list-style-type: none">Undertake critical incident investigation and reportingImplement remedial actionsCarry out lessons learned reviews
G. Networks Infrastructure Failure		The risk of sustained or frequent outages arising from weather driven incidents, or operational issues resulting in lower revenues and additional operating costs.	↔		<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">Networks businesses carry out an annual review and update of network security of supply plansOngoing timber-cutting, maintenance and hazard patrolParticipation in the National Emergency Co-Ordination Group for storm and flood related crisis eventsComprehensive network investment review and planning, supported by continued accreditation to PAS 55 asset management standard for the optimal management of physical assets <p>If the risk materialises:</p> <ul style="list-style-type: none">Review of storm damage to inform asset management plans and future price control submissionsHigh level of network automation to facilitate automatic and / or remote restoration of supply where possibleContingency plans and associated standing instructions available to Network Controllers to facilitate restoration of supply in the case of a loss of major plant24/7 system manager rotas and customer rotas in place to provide after-hours system management during fault situations and to manage stakeholder interaction post event in an emergency situationIdentification of the cause of the plant outage and implementation of the necessary maintenance actions, and if required, amendments to ongoing maintenance plans

RISK TITLE	STRATEGIC PILLAR	RISK DESCRIPTION	RISK CLIMATE	UPDATE	STRATEGIC RESPONSE
OPERATIONAL (Continued)					
H. Generation Plant Availability		The risk of technical or operational issues, or inadequate service level agreements resulting in lower availability, leading to lower revenues and additional operating costs.	↔	<ul style="list-style-type: none">■ Although generation plant performance was excellent in 2016 at 93%, high levels of plant availability remain a priority■ Continued focus on emissions compliance	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Specific targeted projects to improve availability of key assets■ Long-term asset maintenance plans in place for generation plant, supported by continued accreditation to PAS 55 asset management standard for generation assets■ Participation in National Emergency Co-Ordination Group for storm and flood related crisis events■ Retention of key operational / maintenance skills <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Availability of strategic spares■ Make arrangements for availability of specialist knowledge at short notice, supported by contractual arrangements with original equipment manufacturers■ Identification of the cause of the plant outage and implementation of the necessary maintenance actions and, if required, amendments to ongoing maintenance plans
I. IT Failure	 	A risk of major failure of IT infrastructure or IT systems, arising from a successful cyber-attack or non-malicious failure.	↔	<ul style="list-style-type: none">■ Business dependency on IT systems and telecoms has resulted in a continued focus on this risk■ New legal requirements for critical infrastructure providers under the Directive on Security of Network and Information Systems (NIS Directive)	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Built-in resilience, including backup and recovery facilities■ Regular review and update of Business Continuity and Disaster Recovery Plans■ Ongoing monitoring of technical performance and reliability■ Arrangements for timely system upgrades■ Dedicated and continuous monitoring of cyber risk by the IT Security Team■ Ongoing cyber security awareness programme for employees■ Prepare for new compliance requirements for NIS Directive <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Activation of recovery plans and communications plans prepared for key stakeholders, depending on incident■ Share findings and knowledge from incidents to manage future risks
J. Data Loss	 	Loss of data integrity or breach of Data Protection Act / E-Privacy directives.	↔	<ul style="list-style-type: none">■ Business dependency on IT systems and telecoms has resulted in a continued focus on this risk■ New General Data Protection Regulation in place	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Data protection policies in place■ Dedicated data protection manager■ Ongoing data protection training■ The findings from the data protection audit are being shared across the Group and recommendations are being implemented <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Activate communications plans prepared for key stakeholders depending on incident
STRATEGIC					
K. Disruptive Market / Technology, Competitors	 	Failure to respond to new and aggressive forms of competition and innovation, including disruptors such as new business models, technologies and competitors, which could result in the loss of significant market share in both retail and wholesale markets, which would have an adverse effect on profitability, and challenge ESB's delivery of its strategic goal of Generation / Supply Businesses of Scale and Sustainable Innovation.	↔	<ul style="list-style-type: none">■ Momentum is sustained in relation to the development of new energy technologies and the energy supply market remains active, with more aggressive pursuit of market share by competitors■ No new competitors or significant new technologies in the market during 2016	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Implementation of innovation strategy road maps■ Identify external collaboration and knowledge sharing opportunities through joint ventures and technology partners■ Establishment of an off-site innovation hub■ Successful establishment of new businesses such as Smart Energy Services■ Pursuit of innovative initiatives such as the Big Energy Hack■ Provide excellent customer service and deliver competitive price offerings and innovative products to customers■ Build customer loyalty through affinity programmes and focus on digital marketing initiatives / platforms.■ Further expansion in the NI residential market■ Increase business flexibility through outsource partners■ Continue pursuit of road map for an integrated Generation Trading and Supply model for ESB <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Amend the ESB Group Strategy and formulate a decision on whether to enter new markets, acquire new businesses or consider any additional investment needs■ Renewed focus on competitively priced products and strong customer service

RISK TITLE	STRATEGIC PILLAR	RISK DESCRIPTION	RISK CLIMATE	UPDATE	STRATEGIC RESPONSE
STRATEGIC (Continued)					
L. Organisational Capability		Failure to attract new talent, or to retain and develop existing talent could result in a deterioration in business performance or could reduce the ability to deliver the ESB Group Strategy, as ESB is highly dependent on the technical competency of its management and employees.	↔	<ul style="list-style-type: none">■ Retention and recruitment of certain specialist employees continues to be challenging	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Deliver the People Strategy, which is centred on employee engagement and implementation of a new employment model■ Detailed Group resource plan in place which highlights resource requirements in the short to medium term■ Implement succession planning within each business unit■ Carry out graduate recruitment and development to support business growth■ Provide innovators with the time and resources to pursue ideas in line with the ESB Group Strategy <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Review options for short-term resourcing for critical capabilities or skillsets■ Review options for short-term redeployment of resources to key vacancies, based on key skillsets from previous roles and, in parallel, fast-track training of replacements for the critical roles within the businesses
M. Industrial Relations Environment		A risk of industrial action, arising from failure to agree on a new sustainable reward model.	↔	<ul style="list-style-type: none">■ ESB continued to engage with the Group of Unions in 2016 on pay and conditions for current and future employees in ROI■ Agreement was reached with all but one of the affiliate unions in 2016. This last union notified acceptance in February 2017 and implementation continues	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Industrial relations processes and procedures being fully utilised to reach a successful conclusion■ Ongoing engagement with employees <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Utilise internal resolution mechanisms and procedures to address specific issues■ Initiate crisis management and contingency planning arrangements
N. Legal Risk		Risk of significant environmental incident resulting in breach of law / licence. Increase in number and complexity of legal challenges, coupled with increasing requirements of compliance legislation.	↑	<ul style="list-style-type: none">■ Continued engagement with public during 2016 through the Freedom of Information (FOI) for ESB Networks DAC and Access to Information on the Environment (AIE) processes	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Ongoing monitoring of legal and compliance requirements■ Dedicated legal team in place to advise on legal and statutory requirements■ FOI and AIE processes in place <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Consideration of impact on a case-by-case basis■ Activate communications plans to update key stakeholders
O. Strategy Execution		Failure to execute the agreed ESB Group Strategy in terms of not responding to external changes which impact on strategic aims, not achieving targets, targets not delivering expected outcomes, or misallocation of capital, people or focus to facilitate delivery of the target.	↔	<ul style="list-style-type: none">■ Over the course of the year, a review of the external business environment and any related impact on the ESB Group Strategy was completed. Following this review, the ESB Group Strategy was affirmed by the Executive Team and Board. Specific consideration was given during 2016 to the impact of COP21 and Brexit on the ESB Group Strategy. In addition, an assessment was completed of the status of the Strategic Performance Indicators (SPIs).	<p>To prevent the risk materialising:</p> <ul style="list-style-type: none">■ Robust governance and oversight arrangements established involving Board and Executive Team■ Detailed annual review of external business environment, combined with ongoing monitoring of key areas■ SPIs defined and actively monitored■ Extensive review meetings implemented bi-annually (minimum) with Executive Team and business unit nominees■ Corporate planning process defined, approved, documented and implemented■ Appropriate allocation / prioritisation of Group capital through annual planning process <p>If the risk materialises:</p> <ul style="list-style-type: none">■ Complete a full strategy review, including priorities and targets■ Reallocate resources including consideration of divestment / closure options■ Complete a root cause analysis of causes of failure to achieve agreed strategy

STRATEGY

STRATEGIC PLANNING PROCESS

The Board’s strategy governance process involves a Board review of ESB’s Group Strategy to 2025 which is primarily focused on the external business environment and a subsequent review which is primarily focused on performance in delivering the strategy. The process also involves a review of Strategic Performance Indicators (SPIs).

ESB GROUP STRATEGY TO 2025

The ESB Group Strategy to 2025 as approved by the Board is based on the overall goal of being a Strong, Diversified, Vertically Integrated Utility with a presence of scale across the value chain. It is underpinned by five key priorities which are:

- Generation / Supply Businesses of Scale
- Advanced Networks
- Sustainable Innovation
- Transformed Cost Structure
- Engaged and Agile Organisation

The Board undertook a review of ESB’s Group Strategy to 2025 which reaffirmed ESB’s strategic priorities and the overall direction of the business. The review emphasised the need for ongoing innovation and investment to transition ESB to a low-carbon future.

The conclusion of the Board’s strategy review during 2016 was that the overall rationale of ESB Group Strategy to 2025 still applies, i.e. to be adaptable, responsive and opportunistic in an era of unprecedented uncertainty and have a presence of scale across the utility value chain with a mix of regulated and unregulated businesses while maintaining a BBB+ investment grade credit rating.

ESB’S BUSINESS ENVIRONMENT

A summary of the key business environment factors that significantly impact on the ESB Group Strategy are set out below.

1 CLIMATE AND ENERGY POLICY

Climate change and decarbonisation have moved to the centre of Irish, United Kingdom (UK), European Union (EU) and international policy agendas. This will present both challenges and opportunities for the energy sector for the foreseeable future.

In December 2015, at the United Nations (UN) Climate Change Conference, 195 countries adopted the first ever universal, legally binding global agreement on climate change. The Paris Agreement was formally ratified as a legal treaty in November 2016. It sets a commitment to keep rises in global temperature to well

below 2° celsius with a target of 1.5° celsius. An ongoing cycle of five-year reviews of national contributions to this target has been agreed, so although current total contributions would not keep global temperature rises below 2° celsius, these reviews can accelerate the ambition and collective effort to meet the targets.

Current EU policy is to reduce total greenhouse gas emissions production by 80-95% by 2050. The UK Government has also set a target of an 80% reduction in emissions by 2050. In the medium-term, the EU has adopted a 2030 objective of a 40% reduction in greenhouse gas emissions. Each Member State will have a single annual binding target for greenhouse gases in agriculture, transport and buildings. From 2021, there will be an Energy Union governance process which provides for national long-term plans and tracking of progress on greenhouse gases and on EU-level renewable and efficiency goals.

In the near-term, under the 2020 framework, there are legally binding targets at national level to decrease carbon emissions for sectors such as transport, agriculture and buildings. The Republic of Ireland (ROI) and the UK also set targets for the proportion of electricity from renewable sources of 40% and 30%, respectively by 2020.

2 IRELAND’S PATH TO A LOW-CARBON ENERGY SYSTEM AND THE ROLE OF ELECTRIFICATION

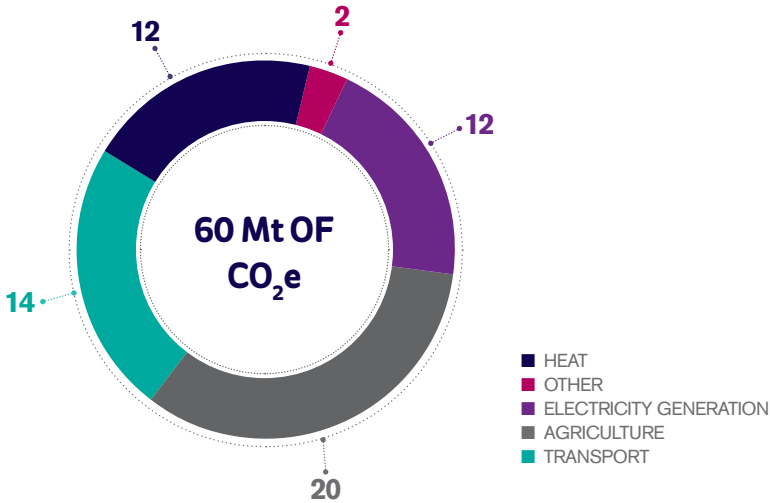
The ROI is now committed to the long-term, progressive decarbonisation of its energy system,

80% by 2050 and 100% by 2100. The total allowable emissions in ROI by 2050 will need to reduce to circa 6 million tonnes (Mt) of carbon dioxide equivalent (CO₂e).

- Annual emissions in ROI totalled circa 60 Mt CO₂e in 2015 which includes the following:
- 20 Mt CO₂e, from agriculture where a 2050 target of carbon neutrality between agriculture and other land use such as forestry is now Government policy.
 - 12 Mt CO₂e from electricity, which is separately monitored and controlled under the pan-European Emissions Trading Scheme (ETS). The legal and market structures of the ETS make individual companies rather than governments liable for reducing emissions and the electricity sector is on track to achieve the required decarbonisation.
 - 26 Mt CO₂e from heat and transport sectors which face upward pressure in the period to 2050, given forecasts that Ireland’s population will grow by 29%, the number of cars will grow by 54% and the stock of housing by 34%.

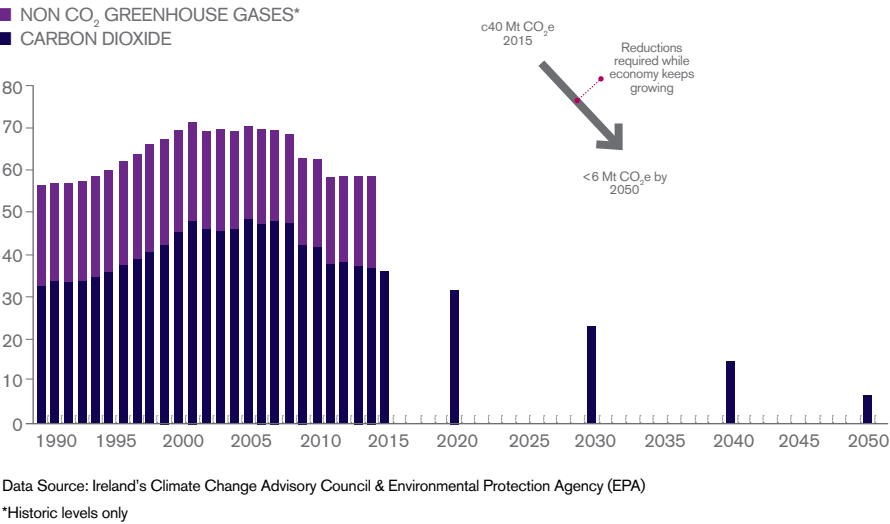
Given the scale of Ireland’s current emissions and the agreed national targets to 2050, the change required will need to be transformational across all sectors. In relation to electricity, the end point is clear with market structures already in place to deliver this. So too are the steps needed in the short-term for the electricity sector with a clear emphasis on connecting and increasing the use of renewable resources and using fuels such as gas to provide large-scale, controllable energy during this transition to a fully low-carbon energy system.

IRELAND’S TOTAL EMISSIONS IN 2015



Data Source: ESB’s analysis based on Sustainable Energy Authority of Ireland (SEAI)

IRELAND’S GREENHOUSE GAS EMISSIONS IN MILLIONS OF TONNES OF CARBON DIOXIDE EQUIVALENT (Mt CO₂e)



In the medium to long-term, there are choices to be made for the electricity sector and the best technologies to deliver the end result are not yet apparent. ESB is already involved in generating electricity from wind and solar energy, trialling of ocean energy, piloting the use and integration of battery-storage technologies and investigating options to reduce the carbon intensity of its coal-fired and peat-fired generating stations.

While the regulatory framework for electricity decarbonisation is reasonably clear, electricity only accounts for 20% of Ireland’s total emissions. However electricity offers a pathway to low-carbon transport and heat. There is no need to wait until carbon is fully removed from the electricity system to make the changes because electric-powered heat and transport are already more carbon efficient than oil-powered heat and transport. Government policy in the ROI, as in the UK, is supported by expert analysis which recognises that removing carbon from transport and heat is key to addressing climate change and to meeting national emissions targets and electrification of these sectors is key.

3 DEMAND, TRANSFORMATION AND INNOVATION

Demand for electricity from traditional sources has fallen in recent years, through a combination of economic, technical efficiency and policy effects. As economic recovery and growth continues so will the demand for electricity though likely to be at a lower pace. However electricity could also experience growth

from non-traditional sources if electricity is used as a means for taking carbon out of transport and heat.

The pace of transformation and innovation has increased in the utility sector driven by energy policy needs and new technologies creating opportunities for new business models to challenge the established order. ESB is actively embracing these challenges through a range of initiatives in some cases through partnering in both the energy sector and adjacent sectors involving information and communication technologies (ICT) and energy specific technologies with new business models.

4 BREXIT

In June 2016, the UK voted by referendum to leave the EU. The full consequences of this result will emerge over the next number of years with uncertainty as to the exact nature and extent of the effects likely for some time to come.

Investments in Northern Ireland (NI) and Great Britain (GB)

Investments in NI and GB have been guided by the strategic objective to have a diversified presence of scale across the value chain in both regulated and unregulated businesses where diversity is key to balancing risk and returns. The investment in Northern Ireland Electricity Networks (NIE Networks) increases the scale of the regulated asset base; irrespective of Brexit, ESB expects to operate within a stable system of regulation that encourages investment in GB and NI.

Policy and Regulation

The ESB Group Strategy also seeks to grow its generation / supply business in scale within an all-islands market. The UK still has a pressing need for renewal of its generation fleet given its recent decisions on closing coal-fired plant, delays in plans for the Hinkley nuclear power station and that GB capacity auctions have failed to date to attract a concrete commitment to new, large-scale dispatchable generation.







Over the last 18 months the regulatory authorities in ROI and NI have jointly pursued the Integrated Single Electricity Market (I-SEM) project to give effect to the requirements of EU policy to harmonise trading between member states. Following on from the Brexit vote, the regulatory authorities in NI and the ROI jointly reaffirmed their commitment to the I-SEM project stating that there are good economic reasons for the all-island market which exist independently of European law or policy. I-SEM will replace the Single Electricity Market (SEM) and will also bring about harmonised trading between the all-island market and that of GB creating the potential for a single, harmonised, wholesale all-islands market. Brexit undoubtedly cast some doubt on the certainty of these outcomes although GB remains the closest and only electrically-connected market to the SEM. It is expected that an ability to trade between these markets, even if distinct separate markets, would still have value both for ESB and other market participants.

Although Brexit creates uncertainty, the UK energy sector continues to provide a pipeline of growth opportunities in diverse but nearby markets and ESB will continue to monitor and manage the current and emerging Brexit related impacts.

5 FINANCIAL STRENGTH

ESB’s profitability is based on achieving regulatory targets and agreeing acceptable returns in its regulated networks businesses as well as successfully competing in energy and related markets. This in turn impacts on its financial strength as reflected in its credit rating and the scale and distribution of its capital investments. ESB’s ownership of regulated networks brings associated large-scale investment obligations so while it still has a presence of scale across the value chain it remains strongly weighted in regulated networks assets.

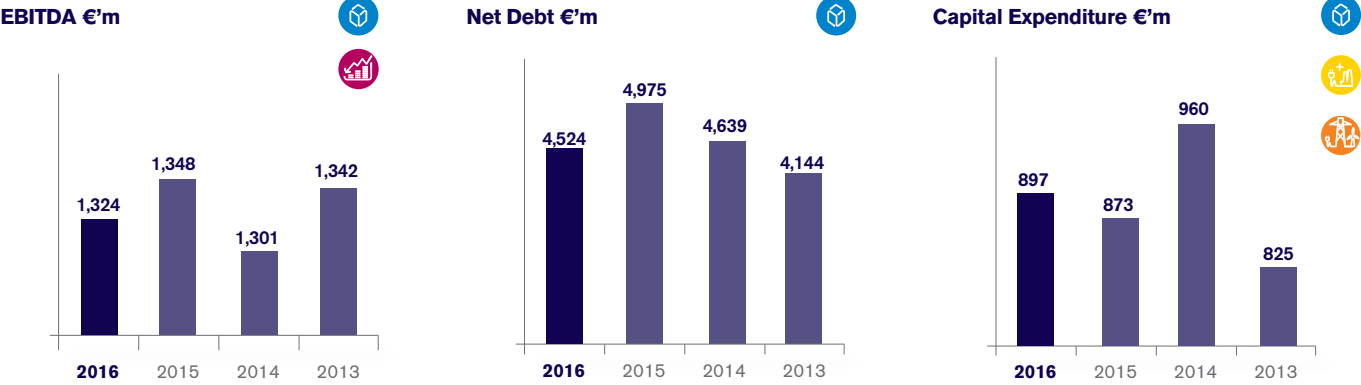
THE ESB GROUP STRATEGY TO 2025 AND PROGRESS AGAINST KEY STRATEGIC PERFORMANCE INDICATORS

2016 BUSINESS ENVIRONMENT	OVERARCHING THEMES	STRATEGIC PRIORITIES	TYPES OF CAPITAL	STRATEGIC PERFORMANCE INDICATORS (SPIS)	2016	2025 TARGET	
<div>1 Climate and Energy Policy</div> <div>2 Ireland's Path to Low-Carbon Energy System and the Role of Electrification</div> <div>3 Demand, Transformation and Innovation</div> <div>4 Brexit</div> <div>5 Financial Strength</div>	<div>Uncertainty and Change</div> <div>ESB is operating in an environment that is unprecedented in terms of both the scale of uncertainty and the potential pace of change. This uncertainty is evident at political, economic, sectoral, policy and market levels.</div>	<div><div></div><div>1 A Strong, Diversified, Vertically Integrated Utility</div><div>ESB sees vertical integration as providing balance and adaptability in the context of such uncertain environments. ESB creates value by managing and developing a portfolio of investments across the energy value chain. It also seeks to exploit its assets and expertise in related adjacent markets. Through disciplined financial management of business units, ESB retains the flexibility to respond to external changes in the environment.</div></div>	<div><div><ul style="list-style-type: none">FinancialManufacturedIntellectualHumanSocial and RelationshipNatural</div><div>Financial Strength</div><div>EBITDA</div><div>BBB+ rating</div><div>€1.3 billion</div><div>BBB+ rating</div><div>€1.5 to €2 billion</div></div>				
	<div>Adaptable and Responsive</div> <div>Given such uncertainty in terms of both the scale and pace of change, ESB needs to be both adaptable in terms of its strategic direction and responsive to changes in the environment that would necessitate such a change. Accordingly, the ESB Group Strategy seeks flexibility and diversity across a range of dimensions including the spread of businesses across the energy value chain; a presence in ROI and UK; a generation portfolio with a mix of fuel types; aligned to a customer facing business; and seeking growth opportunities in adjacent sectors.</div>	<div><div></div><div>2 Generation / Supply Businesses of Scale</div><div>In response to the integration of ROI, NI and GB electricity markets, ESB will grow the scale and capabilities of its generation, trading and supply businesses so that they can compete within this new, all-islands competitive environment. Recognising the long-term imperative to decarbonise society, ESB will also invest to reduce the carbon intensity of its power generation fleet and increase the role of renewable energy in its fuel mix, in line with the overall market and public policy.</div></div>	<div><div><ul style="list-style-type: none">FinancialManufacturedIntellectualHumanSocial and RelationshipNatural</div><div>Total generation capacity (MW)</div><div>All-islands generation market share (% output)</div><div>Renewable capacity as % of total generation capacity</div><div>5,727 MW</div><div>5%</div><div>11%</div><div>7,000 MW</div><div>7%</div><div>26%</div></div>				
		<div>3 Advanced Networks</div> <div>ESB will work to deliver high quality and affordable electricity networks for its customers in both ROI and NI. This will include investment to underpin social and economic development, security of supply and the achievement of climate change targets.</div>	<div><div><ul style="list-style-type: none">FinancialManufacturedIntellectualHumanSocial and RelationshipNatural</div><div>Regulated Asset Base (RAB)</div><div>Smart meters / grids</div><div>Wind energy connected</div><div>€9 billion</div><div>Procurement of Ireland's smart metering solution has commenced</div><div>Connection at end of 2016 at circa 70% of the 2020 target</div><div>€14 billion</div><div>CER requirements fully implemented</div><div>Deliver network connections to support the 2020 renewable energy target</div></div>				
		<div>4 Sustainable Innovation</div> <div>Recognising that forces such as decarbonisation, competition and technological evolution will dramatically change the operating context, ESB will innovate to create and grow new opportunities in areas directly adjacent to its core businesses.</div>	<div><div><ul style="list-style-type: none">FinancialManufacturedIntellectualHumanSocial and RelationshipNatural</div><div>Emerging businesses</div><div>ESB International has had significant customer wins in the Middle East and Europe</div><div>ecars has made significant progress on developing a competitive position</div><div>Smart Energy Services has been launched and is providing services to customers</div><div>SIRO now has the most extensive fibre-to-the-building offering in Ireland and is continuing to build at a fast pace</div><div>Exploit new investment opportunities and increase ESB International's external income</div></div>				
		<div>Financial Strength</div> <div>Underpinning ESB's capacity to deliver on the ESB Group Strategy and to adapt and respond to a changing environment is the maintenance of its financial strength through a disciplined approach to managing business performance, investments and risks.</div>	<div><div></div><div>5 Transformed Cost Structure</div><div>Increased competition, an uncertain economic environment and the need to fund future growth will require ESB to operate with even greater efficiency. ESB will enhance the cost-effectiveness of its business so that it can survive and prosper in this new context.</div></div>	<div><div><ul style="list-style-type: none">FinancialHumanSocial and Relationship</div><div>Cost base</div><div>Implementation of new employment model</div><div>Business unit performance metrics and benchmarking in place</div><div>Procurement change project completed</div><div>Competitive cost structure</div></div>			
		<div>Engaged and Agile Organisation</div> <div>The delivery of the ESB Group Strategy will require an organisation that is flexible, highly motivated and adaptable. ESB will create a dynamic workplace that stimulates and engages its people and that can respond quickly and effectively to change.</div>	<div><div></div><div>6 Engaged and Agile Organisation</div><div>The delivery of the ESB Group Strategy will require an organisation that is flexible, highly motivated and adaptable. ESB will create a dynamic workplace that stimulates and engages its people and that can respond quickly and effectively to change.</div></div>	<div><div><ul style="list-style-type: none">FinancialIntellectualHumanSocial and Relationship</div><div>Safety</div><div>Engagement</div><div>Change</div><div>72 LTIs (Employees and Contractors)</div><div>ESB Staff Survey to take place in 2017</div><div>New employment model</div><div>Zero injuries</div><div>High levels of engagement and performance</div><div>Fast, locally driven change</div></div>			
		<div><div></div> See pages 44 to 53 for short-to-medium term priorities in the business unit sections.</div>	<div><div></div> See page 16 for types of capital.</div>				

KEY PERFORMANCE INDICATORS (KPIs)

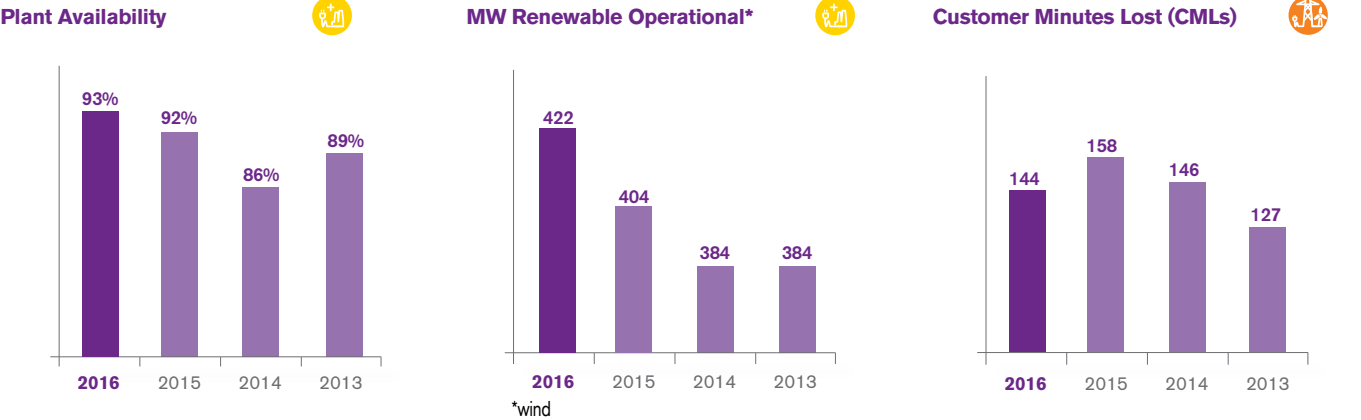
ESB employs financial and non-financial indicators, which signify progress towards the achievement of the ESB Group Strategy. Each business unit has their own KPIs, which are in direct alignment with those of the Group.

FINANCIAL



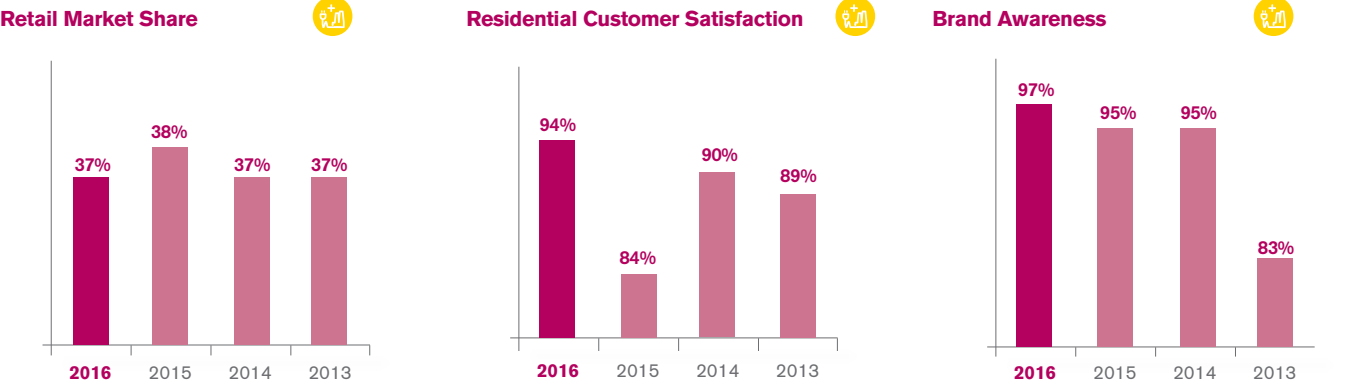
KPI	DEFINITION	STRATEGIC RELEVANCE	PERFORMANCE
EBITDA	Earnings before interest, taxation, depreciation, amortisation and exceptional items	EBITDA is a key measure of the cash generated in the Group during the year which is then available for strategic investments, repayment of debt and dividend payments.	The decrease in EBITDA is driven by lower operating profit. For further detail, see financial review on page 40.
Net Debt	Borrowings and other net debt of cash and cash equivalents	Net debt is a measure of how leveraged the Group is and if it is in line with its key covenants.	Net debt has decreased reflecting positive EBITDA and the weakening of GBP offset by continued capital investment, finance costs, dividends and tax payments. For further detail, see financial review on page 41.
Capital Expenditure	Additions for property, plant and equipment, intangible assets and financial asset investments	ESB is in a period of significant capital investment for both its networks businesses and Generation and Wholesale Markets (G&WM). This is so that ESB can develop the electricity network and deliver the ESB Group Strategy of a Generation Business of Scale.	The increase in capital expenditure is driven by increased spend on renewable investments. For further detail, see financial review on page 41.

OPERATIONAL



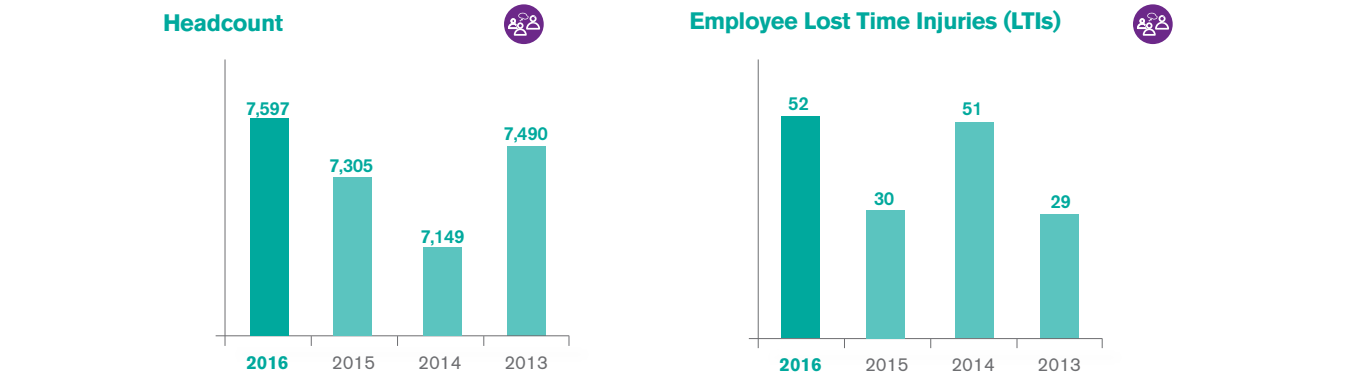
KPI	DEFINITION	STRATEGIC RELEVANCE	PERFORMANCE
Plant Availability	Percentage of the time in the year that generation plant was available to produce electricity, whether they generated or not	Delivering strong operational performance across ESB's generation plant through best practice operations and maintenance and timely completion of overhauls is critical to ESB's commercial performance.	Plant availability and performance remained strong in 2016 allowing ESB's generation plant to respond to system demand and market conditions. For further detail, see G&WM business unit section on page 44.
MW Renewable Operational	Total MWs of renewable generation where the assets have reached their commercial operation date	Renewable generation is key to ESB's objective to reduce the carbon intensity of its generation fleet.	The increase of 18 MW relates to the Raheenleagh Wind Farm in County Wicklow, a joint venture with Coillte Teoranta which went into commercial operation during 2016. For further detail, see G&WM business unit section on page 44.
Customer Minutes Lost (CMLs) ESB Networks	The average duration of interruptions (planned and fault) for all customers during the year	The reliability of the grid and minimising interruptions to customers is of key importance to ESB.	ESB Networks' commitment to reducing the occurrence and duration of customer interruptions saw customer minutes lost reduce.

CUSTOMER AND MARKET



KPI	DEFINITION	STRATEGIC RELEVANCE	PERFORMANCE
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.	Electric Ireland has continued to deliver the objective of a Supply Business of Scale by maintaining a market leading position of 37% of the all-island market. Overall market share decreased by 1% during 2016 primarily as a result of customer losses in the residential market sector. For further detail, see Electric Ireland business unit section on page 50.
Residential Customer Satisfaction	Provides a measure of residential customer satisfaction (Source: Research Perspective Monthly Survey Results)	ESB and Electric Ireland strive to provide excellent customer service and introduce new initiatives to improve the customer experience in order to retain market share.	Residential customer satisfaction improved in 2016 as a result of reducing prices and launching new and innovative products in the market. For further detail, see Electric Ireland business unit section on page 50.
Brand Awareness	Awareness of Electric Ireland as an Energy Supplier (Source: IPSOS Customer Survey Results)	Maintain the Electric Ireland brand as the leading energy supply brand in Ireland.	Brand awareness remained strong in 2016 owing to enhanced marketing, sponsorship and promotional campaigns. For further detail, see Electric Ireland business unit section on page 50.

PEOPLE



KPI	DEFINITION	STRATEGIC RELEVANCE	PERFORMANCE
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 increased in 2016 as a result of recruitment for new business lines along with apprentice and graduate recruitment. For further detail, see note 8 of the financial 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 a core value of the Group. ESB continue to focus on reducing risks in the business that gives rise to injurious incidents.	A new Safety Culture Programme was piloted in 2016 to drive a renewed commitment to the elimination of all incidents and injuries. For further detail, see safety review on page 57.

OPERATING AND FINANCIAL REVIEW

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EXECUTIVE TEAM

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



Pat O'Doherty
Chief Executive

Appointed: December 2011
Career Experience: Prior to his current role, Pat headed up ESB's largest businesses as Executive Director of ESB International, Managing Director of ESB Networks DAC and Executive Director of ESB Power Generation. Pat holds primary and master's degrees in engineering from University College Dublin. He completed the Advanced Management Programme at Harvard Business School. He is a trustee of The Conference Board of the United States, a Director of Energy UK and Chair of the Apprenticeship Council of Ireland.



Jerry O'Sullivan
Deputy Chief Executive

Appointed: October 2014
Career Experience: Prior to his current role, Jerry was Managing Director of ESB Networks DAC. 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.



Paul Mulvaney
Executive Director
Innovation

Appointed: October 2014
Career Experience: Paul joined ESB in 1985 and has held a number of senior management positions, including Manager of Great Island and Moneypoint Generation Stations, Group Manager of Coal / Oil / Gas Stations, Asset Manager Power Generation and Programme Manager, Corporate Change. He was appointed Managing Director of ecars in 2009 and Head of Distribution and Customer Service, ESB Networks in 2012. Paul holds a degree in mechanical engineering and has completed the advanced management programme at the IESE Business School in the University of Navarra, Spain.



Pat Naughton
Executive Director
Group People and
Sustainability

Appointed: June 2012
Career Experience: A mechanical engineer by profession, 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.



Pat Fenlon
Executive Director
Group Finance and
Commercial

Appointed: July 2016
Career Experience: Prior to his current role, Pat held a number of senior financial, commercial and general management positions across ESB including Group Finance and Commercial Manager, Group Treasurer, General Manager of Electric Ireland and Corporate Change Manager. He is a Fellow of Chartered Accountants Ireland and worked with PwC in Dublin before joining ESB in 1993.



Paddy Hayes
Executive Director
Generation and
Wholesale Markets

Appointed: June 2012
Career Experience: Prior to his current role, Paddy held various senior management positions in ESB including Head of Independent Generation. Prior to joining ESB in 1999, Paddy worked in a number of roles with British Steel. A chartered engineer, he holds a master's degree in engineering from University College Dublin and an MBA from the University of Warwick, UK.



John Redmond
Company Secretary

Appointed: October 2002
Career Experience: Prior to his current role, John was Group Secretary and Senior Vice President Corporate affairs of GPA Group plc. and subsequently Company Secretary of Debis AirFinance BV (an associate of Daimler Chrysler) and of the SEC registered Airplanes Limited. From 1980 to 1988, he worked in the Department of Foreign Affairs and the Department of Finance. He is a graduate of Maynooth University and holds postgraduate qualifications in corporate governance from Napier University, Edinburgh and from University College Dublin. He became a Fellow of the Institute of Chartered Secretaries in 1997.



Marguerite Sayers
Managing Director
ESB Networks DAC

Appointed: November 2014
Career Experience: Marguerite joined ESB in 1991 and holds a degree in Electrical Engineering from University College Cork. Previously, she held the roles of Head of Asset Management for ESB Networks and Customer Service Manager for Dublin South, and has also had roles in HR, Network Planning, Operations and Construction. Marguerite was also Manager ESB Generation where she was responsible for ESB's 5,500 MW generation portfolio in Ireland and the UK. She serves on both Engineers Ireland's Council and Executive Committees and is a member of the National Paediatric Hospital Development Board.



Jim Dollard
Executive Director
Business Service Centre (BSC)
and Electric Ireland

Appointed: July 2013
Career Experience: An accountant, Jim began his career at ESB in 1992 and has held a number of senior management positions throughout the Group. Jim holds both a bachelor's degree in commerce and a master's degree in business studies from University College Dublin.

MARKET STRUCTURE AND OPERATING ENVIRONMENT 2016

1 OVERVIEW OF THE ELECTRICITY MARKETS STRUCTURE

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

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

The Commission for Energy Regulation (CER) is the independent regulator of the energy market in ROI. The Northern Ireland Authority for Utility Regulation (NIAUR) is the independent regulator of the energy market in NI.

Single Electricity Market (SEM)
The SEM is the single wholesale market (pool) for electricity in ROI and NI. SEM is a mandatory gross pool, so all generators have to sell and suppliers have to buy power through the pool. The pool sets the spot price for electricity, known

as the System Marginal Price (SMP) every half hour. Generators also receive separate payments based on their availability through the capacity payment mechanism. Price volatility in the pool is managed by generators and suppliers entering into fixed financial contracts (contracts for differences).

British Electricity Trading and Transmission Arrangements (BETTA)
BETTA is the wholesale electricity market operating in Great Britain (GB). Unlike the SEM, trading can take place between generators and suppliers either bilaterally or on exchanges and 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. As part of its Electricity Market Reform (EMR) initiative to incentivise investment in low-carbon electricity and improve security of supply and affordability, the British Government has introduced a capacity remuneration scheme, where generators are awarded capacity contracts based on the outcome of an auction, enabling them to receive payments for the provision of generation capacity while also incurring penalties for non-delivery during scarcity events.

Integrated Single Electricity Market (I-SEM)
Efficient implementation of the EU Target Model, which is a set of harmonised arrangements for cross-border trading of wholesale energy and balancing services across Europe, is the main driver for the introduction of I-SEM. In

response to the proposed changes, ESB has established an I-SEM programme to ensure that the business is ready for the new market arrangements. I-SEM was initially scheduled to replace SEM in October 2017, however, in November 2016, the go-live date was rescheduled by the regulatory authorities to May 2018.

In parallel with I-SEM and in response to binding national and European targets, EirGrid began a multi-year programme, known as Delivering a Secure, Sustainable Electricity System (DS3). The aim of the DS3 Programme is to meet the challenges of operating the electricity system in a secure manner while achieving the 2020 renewable electricity targets. The DS3 Programme is designed to ensure that the power system can securely operate with increasing amounts of variable nonsynchronous renewable generation (e.g. wind) over the coming years.

Electricity Networks
The electricity transmission system is a high-voltage network for the transmission of bulk electricity supplies. The distribution system delivers electricity to individual customers over the 38kV / medium / low voltage networks. In ROI, ESB manages the transmission and distribution system network and operates the electricity distribution system network, while EirGrid operates the transmission system network. In NI, Northern Ireland Electricity Networks (NIE Networks) 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 somewhat isolated compared to systems in mainland Europe and in GB. The Moyle Interconnector links the electricity grids of NI and Scotland through submarine cables running between converter stations in NI and Scotland. The link has a capacity of 500 MW, enabling two-way transmission of electricity.

The East-West Interconnector 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 kilometres in length, the underground and undersea links have the capacity to transport 530 MW. In September 2016, following routine maintenance, a fault

occurred on the East-West Interconnector which resulted in the interconnector being declared out of service until December 2016.

ESB is an active participant in both the Moyle and East-West Interconnector markets and was responsible for 65% of total imports and 2% of total exports during 2016.

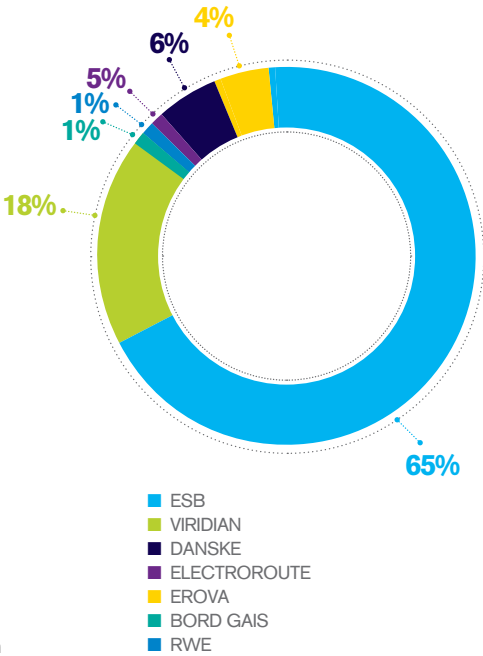
Electricity Generation
The SEM generation sector comprises approximately 13,446 MW of capacity connected to the system on an all-island basis (2015: 12,785 MW). The capacity connected to the system includes a mix of older generation plants alongside modern combined cycle gas turbine (CCGT) plants and renewable energy sources such as wind and hydro power. These stations generate electricity from fuels such as gas, coal and oil as well as indigenous resources including hydro, wind, peat and biomass.

The SEM has 3,100 MW of wind installed (2015: 2,963 MW), which is key to both the ROI Government and NI Executive's individual targets for 40% of electricity to be generated from renewable resources by 2020. Wind contributed to 18% of generation in 2016 (2015: 21%), with a maximum wind output of 2,827 MW being recorded in December. ESB was responsible for 47% of total generation in SEM in 2016 (2015: 49%). 2016 saw good availability of baseload thermal generation in SEM, with gas and coal continuing to dominate generating fuels in the market.

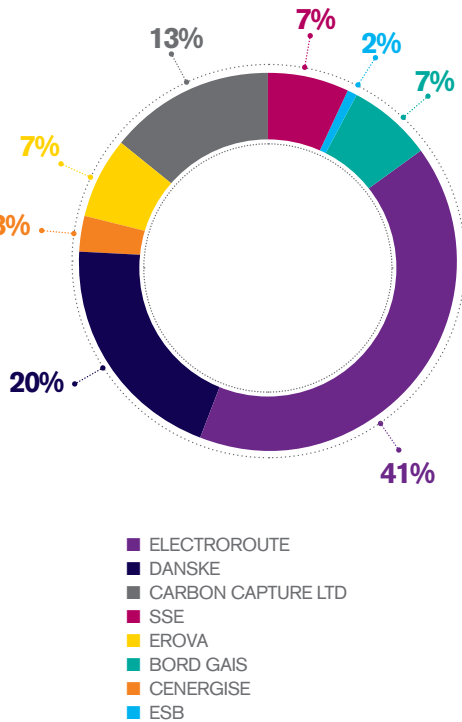
Electricity Trading
The electricity and gas markets in GB, ROI and NI are linked in two ways, firstly through gas being used for electricity generation and secondly through the physical interconnection of electricity and gas networks. In common with a number of other companies in the Irish market ESB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

In addition to ESB's generation interests, ESB is active in all sectors of the gas supply market from residential to large commercial customers and is one of the biggest gas shippers on the island. ESB is continuing to grow in the electricity and gas markets and key developments in 2016 included the entry into commercial operation of the Carrington Plant near Manchester. Supporting this activity ESB Trading has a full trading capability up to real time with a 24 hour trading presence in the gas and electricity markets.

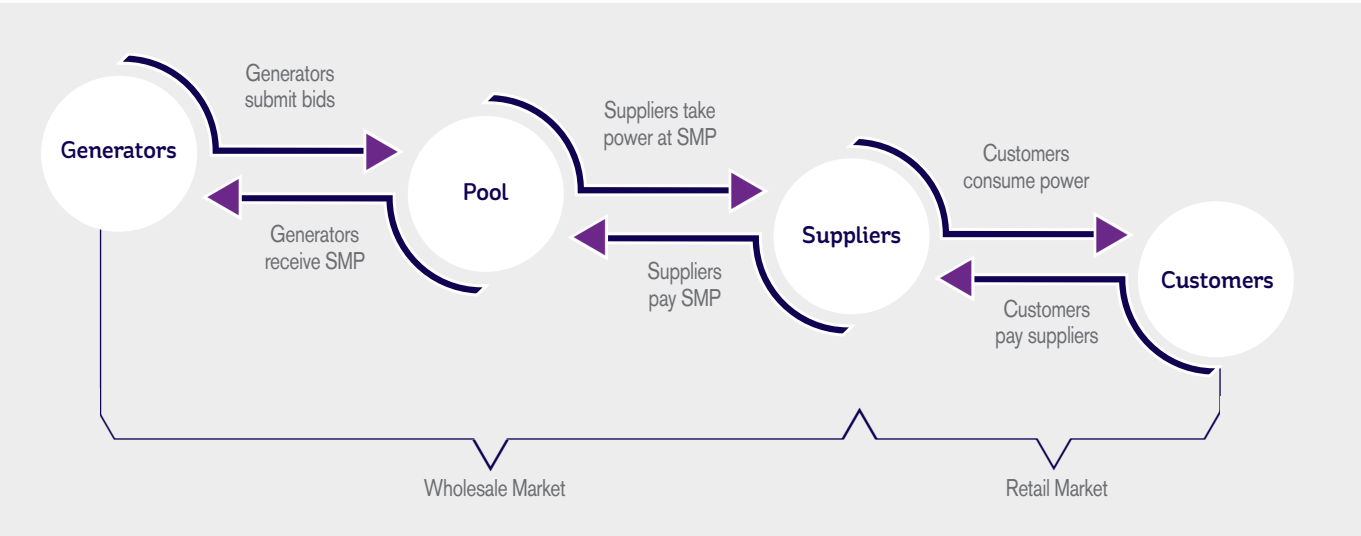
IMPORT MARKET SHARE



EXPORT MARKET SHARE



SINGLE ELECTRICITY MARKET (SEM)



2
OPERATING ENVIRONMENT

THE GLOBAL ENERGY
MARKETS

Gas Prices

Gas prices for 2016 were on average lower than previous years, continuing the trend from 2015, as a result of increased liquefied natural gas (LNG) supply. The monthly average gas price in January 2016 was 31.94 p/therm rising to a monthly average of 46.54 p/therm in December. The annual average gas price for 2016 was 34.59 p/therm, (2015: 42.56 p/therm).

Coal Prices

Coal prices increased this year, rising from a monthly average of \$45.97/tonne in January at the beginning of the year to a monthly average of \$90.89/tonne by December. This upward movement has been driven by an increase in the demand for coal particularly in China, coupled with a reduction in production over capacity. The annual average coal price for 2016 was \$59.97/tonne, (2015: \$56.61/tonne).

Carbon Prices

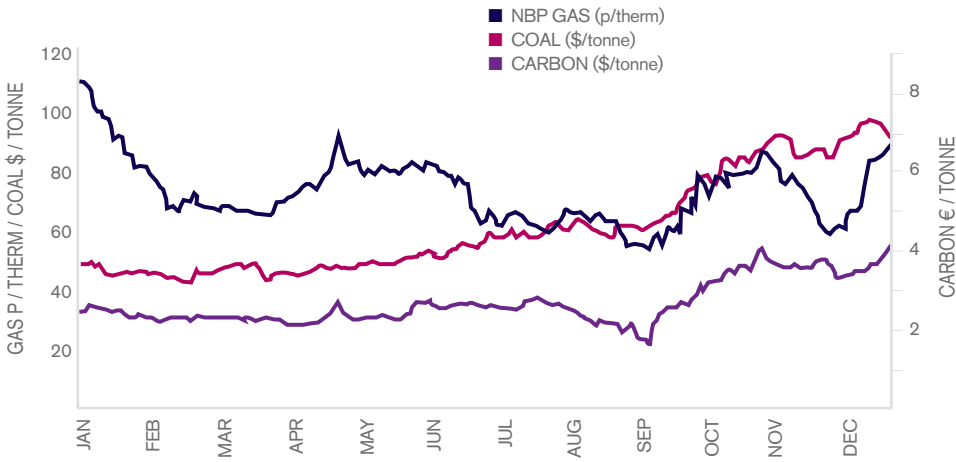
The monthly average carbon price in January was €6.94/tonne and decreased throughout the year, particularly during the third quarter, ending the year with a monthly average of €5.24/tonne in December. The annual average carbon price for 2016 was €5.38/tonne (2015: €7.71/tonne). Carbon price movements are strongly linked to policy decisions and implementation at an EU level rather than commodity prices. The decrease in carbon price in 2016 is linked to an oversupply of EU Allowances (EUAs), though there are potential changes on the horizon.

SEM Wholesale Electricity Prices

The System Marginal Price (SMP) in SEM is made up of two components: (i) the short-run marginal cost of production (SRMC) which is the cost of fuel and (ii) uplift. Uplift is the recovery of start-up and no-load costs, which are fixed costs that do not vary with the level of output.

In 2016, 75% of generation was met by fossil fuels, predominately gas and coal. Gas CCGT units are the most efficient thermal units on the system and the wholesale gas price is closely linked to the SMP. Year on year, the 2016 SMP has fallen by 18% to an average value of €41.82/MWh, (2015: €50.83/MWh), which has primarily been

GAS, COAL AND CARBON PRICES



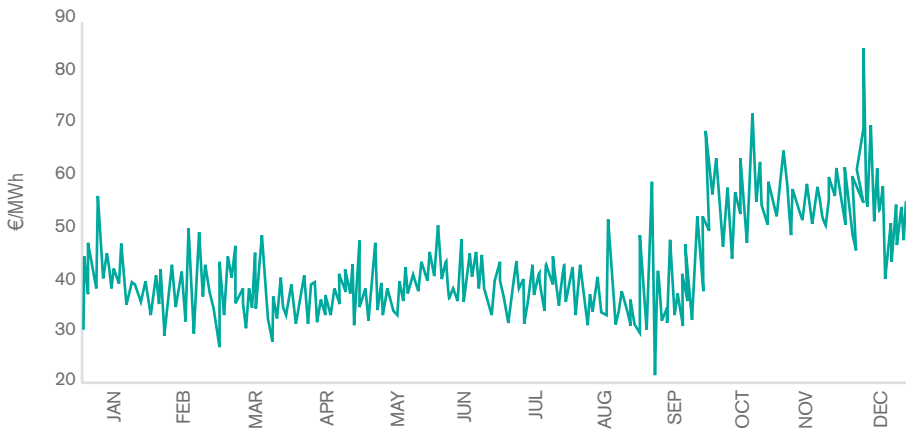
driven by decreasing gas prices. Prices in SEM were also affected in 2016 by significant outages of both the Moyle and East West Interconnectors. These interconnector outages, which overlapped with a number of extended thermal plant outages, resulted in a significant number of price spikes during the year.

The year started off with a monthly average SMP in January of €40.09/MWh, with SMPs falling to an average of €37.60/MWh for

the first nine months of the year, rising to a monthly average of €53.89/MWh in October. The year closed out with a monthly average price of €54.47/MWh in December.

Uplift has been on a downward trend since a regulatory change to the uplift calculation was introduced on 1 January 2015. In 2014, uplift on average was 29% of SMP, while in 2015, this was down to 24% of SMP. 2016 has seen a further significant reduction in uplift to an annual average of 15% of SMP.

SMP (€/MWh)



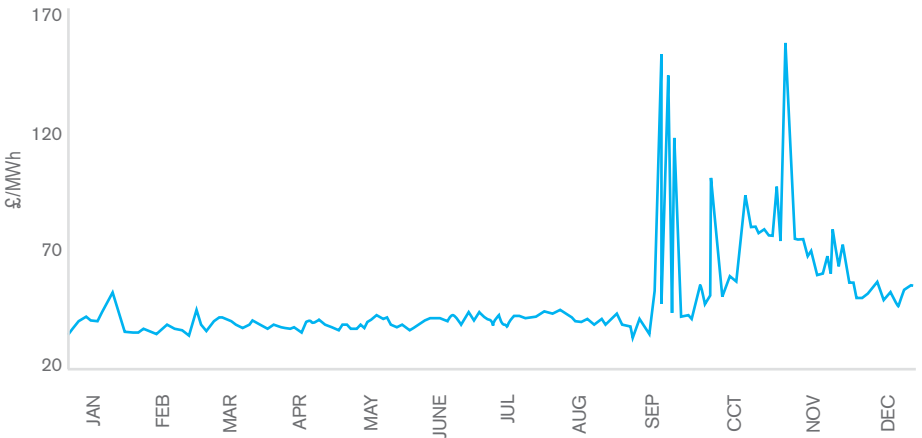
GB Electricity Prices

The entry into commercial operation of the Carrington Plant this year coincided with significant GB and European power market issues which, while positive for the Carrington Plant, serve to highlight the interconnectedness of the EU internal energy market.

2016 saw increased system tightness in GB, which has traditionally relied on imports, primarily through subsea interconnectors with the French and Dutch power grids. With the onset of the issues in the French nuclear industry, which has seen significant outages, GB imports have fallen to the extent that in October 2016, GB exported more electricity than it imported. The issues in France contributed to power price spikes across Europe as it has increased imports of electricity from its neighbours to fill its supply gap. The change of balance also increased the strain on GB's power network at a time when it was already under pressure from the closure of coal-fired plants as part of efforts to reduce carbon emissions.

2016 also saw a pronounced shift away from coal in favour of gas-fired generation in GB, driven by lower gas prices, higher coal prices and the GB Carbon Price Support levy. Structural gas price weakness and a tight system reserve margin have driven recovery in the baseload price and margins of CCGTs. The relegation of coal in the UK merit order also means higher CCGT load factors, higher average efficiency and lower start costs. All of the above has coincided with the entry into commercial operation of the Carrington Plant, contributing to successful early operation of the plant.

GB BASELOAD (£/MWh)



FINANCIAL REVIEW



PAT FENLON
Executive Director
Group Finance and Commercial

What are the key financial achievements for ESB in 2016?

2016 was characterised by strong operational performance, which in turn resulted in healthy financial performance by the Group. Excellent plant availability in generation, along with the successful commercialisation of the new 885 MW Carrington Plant in 2016, contributed to a strong financial performance from the Generation and Wholesale Markets (G&WM) business notwithstanding the challenging operating environment. Our networks businesses continued to successfully deliver significant capital and maintenance programmes in accordance with their regulatory contracts to enhance resilience and support a further increase in renewable generation. Electric Ireland, ESB's retail arm, delivered an improved financial performance, largely influenced by its active management of commodity exposures while providing competitive offerings in what continues to be a very competitive market place.

This performance is reflected in the Group's EBITDA level of €1.3 billion

for 2016 (2015: €1.3 billion) with 63% generated from our regulated networks businesses, available liquidity of €1.7 billion and ESB's investment grade credit rating at BBB+ (stand-alone). This healthy financial performance has enabled ESB to pay a total dividend of €116 million for 2016 in line with the agreed dividend policy and to fund €897 million of capital investment in electricity infrastructure for the benefit of ESB customers and the Irish economy.

How does Finance help ESB fulfil its strategic and financial objectives?

A key role of Finance is to enable strategy delivery while protecting the financial strength and integrity of ESB. We do this by working together with each business to:

- Ensure a comprehensive performance management reporting system is in place
- Implement an effective system of internal control
- Optimise the allocation of capital across ESB's portfolio of investment opportunities

Group Treasury also ensures there is proactive management of key financial risks such as foreign currency and interest rate exposures. ESB is well positioned in the debt capital markets. This is clearly demonstrated in the credit rating agencies' re-affirmation of ESB's credit rating at BBB+ (stand-alone) and the successful placement of a €600 million 1.875% fixed rate bond maturing in June 2031 during 2016 and a €500 million 1.750% fixed rate bond maturing in February 2029 in early 2017.

What are the principal challenges the ESB Group faces in the next three years from a financial perspective?

ESB, like many other companies, is facing a number of strategic financial challenges.

Uncertainty

ESB faces a number of uncertainties as markets, regulation, technology and customer requirements all continue to evolve. The future Integrated Single Electricity

Market (I-SEM) due to go-live in May 2018 presents a degree of uncertainty and will alter how our businesses, in particular G&WM and Electric Ireland, earn revenues and manage risks. An I-SEM project has been established to ensure ESB is ready to respond to these changes.

The full consequences of Brexit are likely to emerge over the next number of years. While this creates uncertainty, we will continue with prudent financial management of our United Kingdom (UK) assets, which are matched with GBP funding. We will continue to monitor the impacts from Brexit and other world-wide socio-political events and take prudent financial management actions, as appropriate, so as to protect ESB's financial strength.

Performance Delivery

ESB is well positioned to respond to performance delivery challenges. Such challenges include increased volatility and downward pressure on wholesale energy margins, negotiation and delivery of the regulatory frameworks for our two networks businesses that preserve financial strength and appropriately responding to increasing retail competition.

Strategy Delivery

A strategic priority of ESB is to protect its financial strength while implementing the ESB Group Strategy. We carefully manage the significant capital programme to ensure we protect our financial metrics.

Given ESB's diversified vertically integrated business structure, current healthy financial position with solid EBITDA, strong liquidity and stable credit rating, ESB is financially well positioned to ensure these challenges are effectively managed and overcome.

FIGURE 1: FIVE-YEAR SUMMARY

	2016	2015	2014	2013	2012
	€'m	€'m	€'m	€'m	€'m
Revenue and other operating income before exceptional items ¹	3,247	3,364	3,293	3,445	3,295
Operating profit before exceptional items ²	597	635	552	684	576
Adjusted profit before taxation ³	382	381	307	450	351
EBITDA excluding exceptional items ⁴	1,324	1,348	1,301	1,342	1,256
Capital expenditure	897	873	960	825	765
Net debt	4,524	4,975	4,639	4,144	4,414
Gearing (%) ⁵	51%	55%	53%	48%	53%
Total assets	12,907	13,157	12,973	12,782	12,600

¹ Before the following exceptional items: 2014: profit on asset disposal (€38 million) and non-cash gain (€94 million). 2013: profit on asset disposal (€95 million).

² Before the following exceptional items: 2015: impairment charge (€104 million). 2014: profit on asset disposal (€38 million) and non-cash gain (€94 million). 2013: profit on asset disposal (€95 million). 2012: staff exit costs (€161 million).

³ Adjusted profit before tax: The profit before tax figure adjusted for exceptional items and the fair value movements on interest rate swaps.

⁴ Before the following exceptional items: 2015: impairment charge (€104 million). 2014: profit on asset disposal (€38 million) and non-cash gain (€94 million). 2013: profit on asset disposal (€95 million). 2012: staff exit costs (€161 million).

⁵ Excludes joint ventures.

FIGURE 2: SUMMARISED INCOME STATEMENT

	2016	2015
	€'m	€'m
Revenue and other income	3,247	3,364
Operating costs	(2,650)	(2,729)
Operating profit	597	635
Exceptional items	-	(104)
Operating profit after exceptional items	597	531
Total finance costs	(198)	(245)
Fair value movements on financial instruments	(190)	30
Share of equity accounted investees loss	(15)	(9)
Profit before tax	194	307
Tax charge	(8)	(21)
Profit after tax	186	286

REVENUE

Revenue and other operating income before exceptional items at €3,247 million has decreased by €117 million compared to 2015 (€3,364 million).

The decrease is driven by lower revenues in Electric Ireland as a result of lower volumes and price reductions, offset by increased revenues in Generation and Wholesale Markets (G&WM) associated with the commissioning of the Carrington CCGT Plant in Great Britain (GB) and increased regulated income in ESB Networks.

HIGHLIGHTS

OPERATING PROFIT	PROFIT AFTER TAX	CAPITAL EXPENDITURE	2016 DIVIDENDS	RETURN ON CAPITAL EMPLOYED
€597 million	€186 million	€897 million	€116 million	6.1%

OPERATING COSTS

Overall operating costs at €2,650 million have decreased by €79 million.

- Fuel and other energy costs have decreased by €188 million on 2015 levels driven by lower gas costs and lower wholesale electricity prices.
- Depreciation is up €15 million on 2015 due to the larger asset base in 2016.
- Employee costs are up €25 million on 2016 primarily due to the introduction of the new employment model and increased headcount.
- Operating and maintenance costs have increased by €64 million, due in part to a non-cash foreign exchange translation loss on sterling denominated intercompany positions and higher costs associated with strategy implementation and new business activities in 2016.

A breakdown of the operating costs by business segment is provided in note 2.

OPERATING PROFIT

Operating profit before exceptional items has decreased by €38 million. The decrease is driven by the following:

- Negative non-cash foreign exchange translation loss of €36 million on sterling denominated intercompany positions
- Higher operating costs in 2016 of €64 million – see operating costs for further detail.
- Offset by higher gross margin of €62 million in 2016 primarily due to additional margin from the Carrington Plant, the impact of lower wholesale electricity prices and increased regulated income in ESB Networks.

The movement in operating profit between 2015 and 2016 is set out in the reconciliation in **FIGURE 4**.

EBITDA

EBITDA excluding exceptional items for 2016 at €1,324 million is €24 million lower than 2015. This decrease is driven by lower operating profit as described above.

ADJUSTED PROFIT BEFORE TAXATION

Adjusted profit before taxation for 2016 is €382 million (2015: €381 million). While in line year-on-year, there are significant variances as set out in **FIGURE 5**.

A key driver is the negative fair value non-cash movements of €188 million that arose on the inflation linked interest rate swaps in 2016 (2015: €30 million positive) reflecting the current low interest rate environment and higher inflation in the UK.

FIGURE 3: OPERATING COSTS (EXCLUDING EXCEPTIONAL ITEMS)

	2016	2015
	€'m	€'m
Fuel and other energy costs	900	1,088
Depreciation and amortisation	760	745
Employee costs	464	439
Operating and maintenance costs	521	457
Impairment (exceptional item in 2015)	5	-
Total operating costs (excluding exceptional items)	2,650	2,729

FIGURE 4: RECONCILIATION OF OPERATING PROFIT 2015 TO 2016

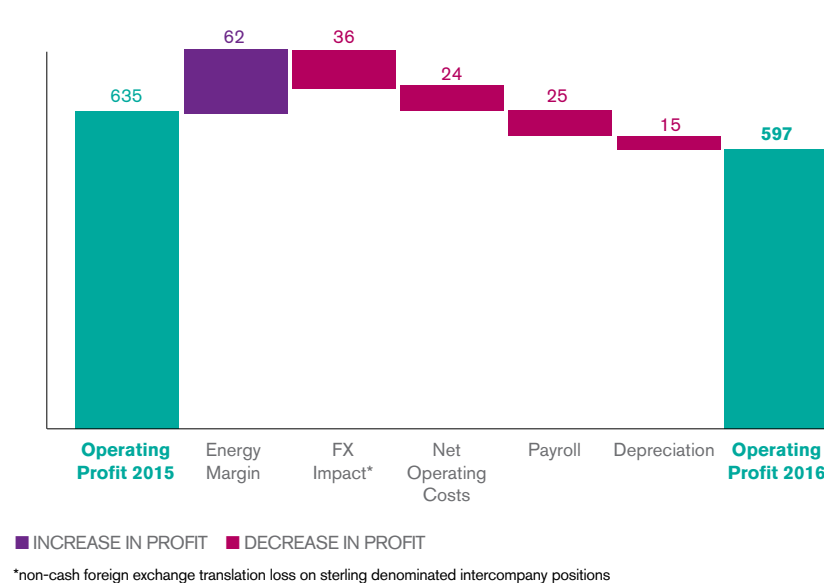


FIGURE 5: RECONCILIATION OF ADJUSTED PROFIT BEFORE TAXATION

	2016	2015
	€'m	€'m
Profit before taxation	194	307
Exceptional items	-	104
Fair value movement on interest rate swaps	188	(30)
Adjusted profit before taxation	382	381

TOTAL FINANCE COSTS

Total finance costs for 2016 are €173 million higher than 2015 costs.

The decrease in net interest on borrowings relates to the impact of weakening GBP on GBP interest payments and a decrease in interest costs.

The movement on the inflation linked interest rate swaps is outlined on page 40. Further detail is included in note 20.

TAXATION

The lower tax charge of €8 million is primarily due to a deferred tax credit in 2016 arising from the inflation linked interest rate swaps and a deduction for interest associated with the Carrington Plant. Further detail is included in note 18.

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 on pages 44 to 53 and in note 2.

NET DEBT AND GEARING

The decrease in net debt to €4.5 billion in 2016 from €5.0 billion in 2015 reflects positive EBITDA and the impact of weakening of GBP offset by continued capital investment, finance costs, tax and dividend payments in 2016.

The gearing level of 51% is 4% lower than 2015 reflecting lower net debt. During the year total assets decreased to €12.9 billion from €13.1 billion in 2015, reflecting the weakening of GBP.

CAPITAL EXPENDITURE

Capital expenditure totalled €897 million in 2016, this is an increase of €24 million on 2015.

Capital investment in the networks businesses continued in 2016 with €514 million invested in the networks infrastructure in the Republic of Ireland (ROI) and Northern Ireland (NI). This expenditure is based on the five-year capital expenditure programmes agreed with the respective regulators in ROI and NI.

Expenditure in G&WM in 2016 amounted to €262 million (2015: €176 million). This expenditure includes €86 million investment in renewables, €71 million investment in plant overhauls and €48 million on the completion

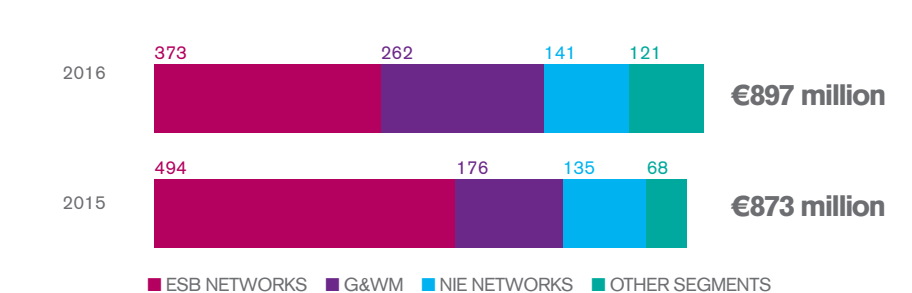
FIGURE 6: TOTAL FINANCE COSTS

	2016	2015
	€'m	€'m
Net interest on borrowings	170	206
Financing charges	37	40
Finance income	(9)	(1)
Net finance costs	198	245
Inflation linked interest rate swaps	188	(30)
Fair value losses on financial instruments	2	-
Total finance costs	388	215

FIGURE 7: SUMMARISED CASH FLOW STATEMENT

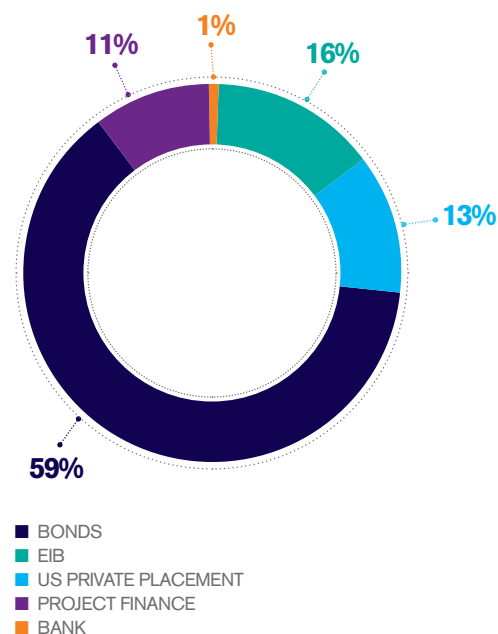
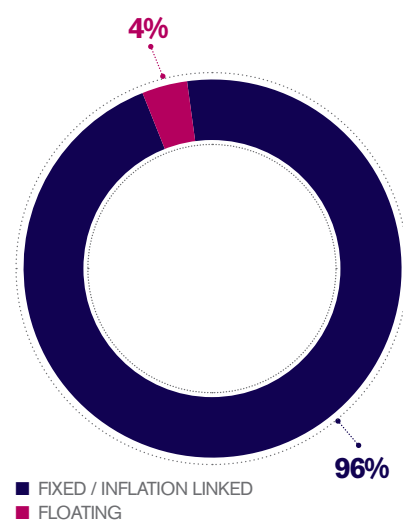
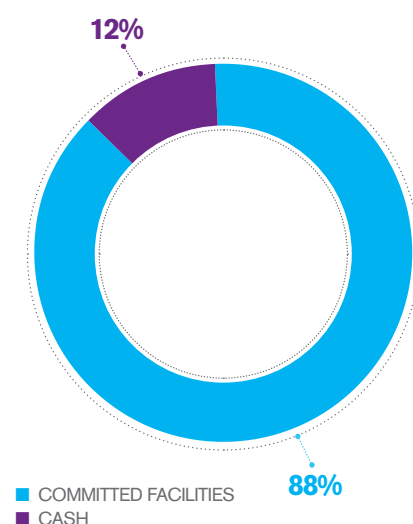
	2016	2015
	€'m	€'m
EBITDA (excluding exceptional items)	1,324	1,348
Provision utilisation and other movements	(74)	(153)
Interest and tax	(239)	(306)
Net cash inflow from operating activities	1,011	889
Sale Proceeds	9	7
Capital expenditure	(770)	(786)
Other	2	1
Net cash outflow from investing activities	(759)	(778)
Net cash outflow from financing activities	(14)	(124)
Net increase / (decrease) in cash	238	(13)

FIGURE 8: CAPITAL EXPENDITURE



of the Carrington CCGT Plant in GB. An increase in the station closure provision of €57 million set out in note 25, is also included. Capital investment in Other Segments includes further investment in Novusmodus, the clean

technology and renewable energy fund in the Innovation business unit, and the progression of other strategic projects for the Group including the redevelopment of the Fitzwilliam Street Head Office and preparation for I-SEM.

FIGURE 9: GROUP DEBT €4.9 BILLION**FIGURE 10: INTEREST RATE MANAGEMENT****FIGURE 11: AVAILABLE LIQUIDITY €1.7 BILLION**

TREASURY MANAGEMENT

FRAMEWORK FOR TREASURY AND TRADING OPERATIONS

The main financial risks faced by the Group are:

- Liquidity and maintenance of access to the debt markets
- Foreign exchange volatility
- Interest rate movements on the Group's existing and projected future debt portfolio
- Fuel commodity price movements
- Counterparty credit exposure
- Operational risk, including exposure to fraud and error

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 financial risks. Some of these risks can be mitigated through the use of derivative financial instruments and when used such instruments are executed in compliance with the specifications of the Minister for Finance issued under the Financial Transactions of Certain Companies and Other Bodies Act 1992. This Act enables ESB to enter into derivative contracts to eliminate or reduce the risk of loss arising from changes in interest rates, currency, commodity prices or other factors similar in nature. IAS 39 cash flow hedge accounting is applied to the Group's derivative positions where possible.

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 note 26.

LIQUIDITY AND FUNDING

The Group's funding activities are of strategic importance and support capital expenditure, the refinancing of maturing debt and the maintenance of adequate liquidity. To this end, a number of milestones were achieved in 2016 to secure the funding and liquidity position of the Group.

In January 2016, the term of ESB's €1.44 billion revolving credit facility was extended by one year. A further one-year extension option was exercised in December 2016, meaning the Group's stand-by liquidity position is now secured until January 2022.

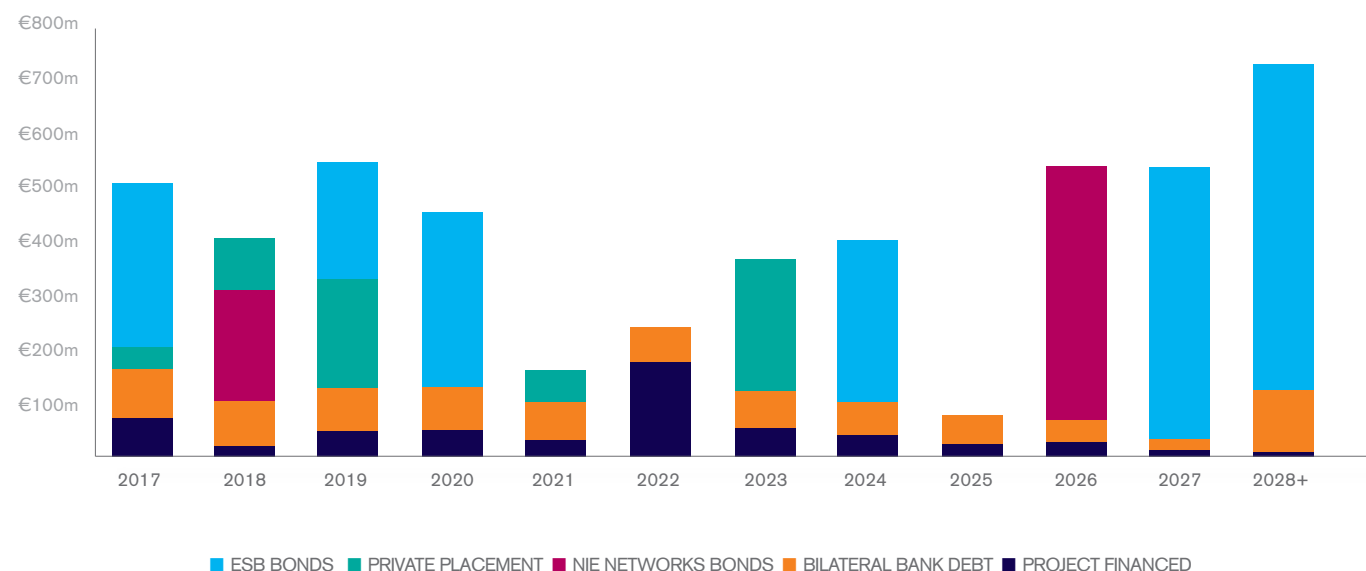
In June 2016, ESB issued a €600 million bond at a fixed coupon of 1.875%,

which will mature in June 2031. Some of the proceeds were used to buy back a portion of a €500 million 6.25% bond due to mature in November 2019. This successful bond placement and buy-back helped the Group to extend the average maturity of its long-term debt at competitive rates.

Following these transactions, the weighted average interest rate on the Group's portfolio of outstanding borrowings at 31 December 2016 was 4.3% and the weighted average duration of such borrowings as at that date was almost nine years. The average cost and duration of the ESB debt portfolio fell further following the successful launch of a €500 million bond at a fixed coupon of 1.750% issued in early 2017, which will mature in 2029. This is consistent with Group Treasury's ambition to secure the Group's liquidity position, minimise the average cost of debt and ensure a balanced and manageable debt repayment profile.

The Group's debt management strategy targets a debt portfolio with a diverse mix of counterparties, funding sources and maturities. Structured non-recourse and limited recourse financing is used where appropriate, taking into account funding costs and the need for risk mitigation. All borrowing facilities are in compliance with the Electricity Acts and relevant regulatory requirements and Group Treasury maintains diversity in ESB's lender base in order to achieve a strategic spread of risk.

ESB's funding position reflects its underlying financial strength and credit ratings of at least BBB+ (or equivalent) from all three major rating agencies. ESB's debt maturity profile as set out in **FIGURE 12** on page 43 is seen as appropriate for the business, particularly in the context of strong ongoing EBITDA performance (2016: €1.3 billion) and liquidity of almost €1.7 billion (between available cash and undrawn committed facilities) at 31 December 2016. The Group continues to proactively manage its borrowing repayment profile and maintains its ability to fund in the future through close ongoing engagement with its banks, debt investors and credit rating agencies.

FIGURE 12: ESB DEBT MATURITY PROFILE AS AT 31 DECEMBER 2016

FOREIGN EXCHANGE AND INTEREST RATE RISK MANAGEMENT

The vast majority of the Group's business is located in the Republic of Ireland (ROI) 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. Foreign currency exposures are managed using currency derivatives such as forward purchase contracts.

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 through the use of derivative instruments. Investments in the UK (including NIE Networks and the Carrington Plant) are generally funded by sterling-denominated debt. Approximately 62% of ESB's debt is denominated in euro, with the remaining 38% in GBP.

The Group's interest rate policy is to maintain a significant majority of its debt at fixed interest rates, with a minimum of 50% fixed at all times. At 31 December 2016, 83% of the Group's debt was fixed to maturity and another 13% was inflation linked.

COMMODITY PRICE RISK

Fuel and carbon prices paid by ESB in connection with its electricity generation activities can exhibit some volatility, depending on market conditions. The resulting 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 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. The Group's supply business, Electric Ireland, provides a natural hedge in this regard.

COUNTERPARTY CREDIT RISK

The Group is exposed to credit risk from the counterparties with which it holds its bank accounts and transacts with in financial and commodity markets. The Group's policy is to limit exposure to counterparties based on assessments of credit risk. Exposures and related limits are subject to ongoing review and monitoring in each business unit, and, on a Group-wide basis, by the Group Trading Committee (GTC). Dealing activities are controlled by establishing dealing mandates with counterparties.

In general, counterparty credit limits set by the GTC are closely linked to the credit rating of each counterparty as determined by the leading credit

rating agencies, although other factors, including security provided and the legal structure of the transaction, may also be taken into account. 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, and these positions are reviewed on a regular basis.

FUTURE OUTLOOK

The rapidly changing economic and regulatory environment, and volatility in market prices, continue to pose challenges to the delivery of ESB's programme of energy infrastructure investment, and other targets set out in the ESB Group Strategy. In order to position itself to successfully adapt to these challenges, over the past twelve months the Group has taken the opportunity to reduce its borrowing cost, extend and smooth its debt repayment profile and improve its liquidity position. Future operating cash flows arising from electricity revenues and associated fuel procurement and foreign currency requirements have been appropriately hedged to mitigate risk. Building on the progress of the past year, the Group's treasury management strategy is to continue to develop and avail of opportunities to support the growth and transformation of the Group, through ensuring access to funding at the best available cost and duration, and through robust processes to identify and manage risk in an increasingly complex environment.

GENERATION AND WHOLESALE MARKETS (G&WM)



PADDY HAYES
Executive Director
Generation and Wholesale Markets

What are the key achievements in 2016 for G&WM?

2016 was characterised by excellent generation fleet availability, the successful delivery of a number of major projects, and by first class commercial performance from generation and trading.

The commissioning of the 885 MW combined cycle gas turbine (CCGT) plant at Carrington, near Manchester in the United Kingdom (UK) was a significant milestone. Its delivery supports our strategic objectives, reducing the carbon intensity of G&WM's generation portfolio and providing growth in our home markets of the Single Electricity Market (SEM) and Great Britain (GB). The installation of ESB's first commercial battery storage project, in a joint venture (JV) with Kingspan, was also a major achievement and a significant step on the transition to a low-carbon future. The battery will be operated to provide time-of-use energy savings for one of our customers, while also providing vital system services.

Strong availability, safely delivered across the generation fleet, was a credit to the operations, maintenance and technical teams making a significant contribution to G&WM's commercial success again this year.

Substantial progress has been achieved on the development of G&WM's renewable portfolio. Raheenleagh Wind Farm in County Wicklow (a JV with Coillte Teoranta) was commissioned and five further wind farms are under construction.

Construction of the 40 MW Tilbury Green Power, waste wood to energy plant, located in Essex, UK (a JV with the UK's Green Investment Bank and Scandinavian equipment suppliers BWSC and AET) remains on course for commissioning and commercial operation in 2017.

How does the business help ESB fulfil its strategic and financial objectives?

G&WM contributes to the ESB Group Strategy by growing its low-carbon generation portfolio in the Republic of Ireland (ROI) and UK. The delivery of the Carrington Plant, rooftop solar generation assets and the Raheenleagh Wind Farm all contributed to progress against this objective during 2016.

G&WM also makes a significant contribution to ESB's financial objectives. Strong performance during 2016 underpinned an operating profit of €231 million.

What are the principal challenges G&WM faces in the next three years?

- G&WM is prepared to face a number of challenges as markets, technology, regulations, customer requirements and environmental demands all have the potential to change rapidly.
- In Ireland, the planned change from the current SEM to a future Integrated Single Electricity Market (I-SEM) by May 2018 presents a degree of uncertainty and increased complexity. It is likely to impact on market revenues and result in increased competition, but G&WM is well placed to respond to this challenge. In GB, the Electricity Market Reform continues to take shape, providing both challenges and opportunities.
- Supporting the secure and affordable transition to a low-carbon future also presents a real challenge. G&WM is actively responding by building renewable wind and solar generation, investing in transition technologies such as high efficiency gas generation and exploring the use of biomass in the peat plants. It is also studying how best to reduce the carbon intensity of our coal plants without losing the critical affordability and security of supply benefits that they provide to the economy.

OPERATING PROFIT

2016 - €231 million

2015 - €241 million*

(€10 MILLION)

*before exceptional

CAPITAL EXPENDITURE

2016 - €262 million

2015 - €176 million

€86 MILLION

OVERVIEW

The G&WM business develops, operates and trades the output of ESB's electricity generation assets. The portfolio consists of 5,727 MW of thermal and renewable generation assets across GB and the SEM, with a further 112 MW under construction.

- With a strong focus on safety, G&WM delivers value by:
- Providing wholesale and traded products to meet market and customer needs
 - Offering system services to support a robust electricity grid and facilitate the integration of renewables
 - Optimising the operation of the ESB generation portfolio
 - Delivering new generation assets to support the objective of leading the transition to a low-carbon future
 - Acting positively in communities close to construction projects and operating assets

FINANCIAL PERFORMANCE

G&WM's operating profit at €231 million is down €10 million on 2015. This primarily reflects falling wholesale electricity prices and capacity income in the SEM fleet offset by strong performance by the newly commissioned Carrington Plant in the last quarter of 2016.

Capital expenditure at €262 million was €86 million up on 2015 due to higher spend on renewable projects, an increase in the station closure provision relating to decommissioning and environmental costs and a reduction in the investment on the Carrington Plant as it reached completion.

OPERATING ENVIRONMENT

The operating environment remained challenging through 2016. Margins in the SEM were generally lower than in 2015 but an increase in demand coupled with commodity price movements changed plant running profiles in the last quarter. GB was characterised by tight physical capacity margins in the last quarter of 2016, leading to an increase in margins on gas plants, which benefitted efficient and flexible generators such as ESB's Carrington Plant.

I-SEM, a new market to replace SEM, is due to go live in May 2018 and is expected to impact on forward hedging capabilities for generators and suppliers.



PROGRESS ON STRATEGIC OBJECTIVES

G&WM is responsible for building a balanced, low-carbon generation portfolio in the all-islands market, in support of ESB's vision of leading the transition to a low-carbon future.

G&WM made significant progress on this objective during 2016 by:

Asset Delivery

- The 885 MW Carrington CCGT Plant entered commercial operation
- Raheenleagh Wind Farm, a 35 MW JV with Coillte Teoranta was successfully completed
- Kingspan ESB, a JV with Kingspan installed over 1,200 kW of new rooftop solar projects

Asset Development

- G&WM invested in Terra Solar, a solar developer with a portfolio of 38 potential projects
- Progress was made on the construction of Eglish, Crockdun, Cappawhite, Moneypoint and Castlepook wind farms
- Tilbury Green Power made progress on the construction of a 40 MW waste wood to energy plant in the UK
- A 1,600 MW CCGT option at Knottingley in Yorkshire, UK was developed in readiness for the December 2016 GB capacity auction

Investment in Existing Assets

G&WM continued to make significant investments (to the value of €72 million) in the existing generation portfolio during 2016, with major overhauls in Dublin Bay and Coolkeeragh power

WORKING TOGETHER

- G&WM continues to work in collaboration with other companies on renewable options to further decarbonise the generation portfolio. Some examples include:
- Raheenleagh Wind Farm, which came into commercial operation during 2016, is a JV with Coillte Teoranta.
 - Kingspan ESB, providing rooftop solar and storage solutions for industrial and commercial customers is a JV with Kingspan.
 - The Tilbury Green Power project (a 40 MW waste wood to energy plant) is a JV with the Green Investment Bank and Scandinavian equipment suppliers BWSC and AET.
 - G&WM is working in partnership with Coriolis Energy, a wind developer, to develop wind generation options in Scotland.
 - G&WM recently made a significant investment in Terra Solar, an Irish solar development company.
 - During 2016, G&WM also increased its collaboration with a number of universities and learning institutions, particularly with University College Dublin and Dublin City University, to support building innovation capability.

stations, and the continuation of a fleet-wide hydro refurbishment programme. G&WM operates and is accredited to PAS 55, the international asset management standard.

G&WM CUSTOMERS

G&WM continues to offer a variety of traded contracts to all supply companies in the SEM on a non-discriminatory basis via an over-the-counter trading platform. These contracts provide suppliers with the opportunity to hedge their power purchases, to better mitigate against power price volatility risk for their residential and commercial customers.

PEOPLE

At 981, employee numbers in G&WM remain similar to 2015. Operating with these numbers, while maintaining the safe and effective performance of the business and delivering the strategy, continues to be a key focus.

Safety is of fundamental importance and G&WM's safety improvement programme during 2016 continued to embed the process safety programme and maintain the focus on behavioural safety. A Safety Culture Change Programme was piloted at locations in Aghada,

County Cork and in Dublin Bay.

All locations within G&WM are covered by an externally audited OHSAS certified safety management system for which accreditation was maintained.

G&WM retained its Excellence through People accreditation. The Carrington Plant was accredited with Investors in People.

SUSTAINABILITY

G&WM operates its business with a focus on minimising environmental impact, aiming to significantly increase renewable generation and reduce the overall carbon intensity of generation. CO₂ output from G&WM's SEM generation plants remains lower than 2005 by approximately 36%. The output from G&WM's full fleet increased by 11% when compared to 2015, due to the commercial operation of the Carrington Plant.

G&WM continues to invest in its Fisheries Conservation Programmes, which deliver clear environmental benefits in terms of improving fish stocks and natural river habitats.

UPDATE ON 2016 PRIORITIES AND PRIORITIES FOR 2017

2016 PRIORITY	2016 PROGRESS	2017 PRIORITY
OPERATIONAL		
Continuing to maintain a healthy and injury-free workplace, increasing safety assurance.	<ul style="list-style-type: none">■ G&WM maintained a focus on behavioural safety, including pilots of the incident and injury-free workplace approach■ Assurance aspects of ESB's Safety Leadership Strategy were strengthened	<ul style="list-style-type: none">■ Continuing to maintain a healthy and injury-free workplace■ Further embedding process safety■ Continuing to improve safety assurance
Safely completing the Carrington Plant, progressing Tilbury Green Power, wind and solar projects to deliver an increasingly diverse range of energy assets and to reduce carbon intensity.	<ul style="list-style-type: none">■ The Carrington Plant and Raheenleagh Wind Farm projects were safely delivered■ Significant progress on Tilbury Green Power and a number of renewable projects under construction■ Further new solar assets were developed by Kingspan ESB	<ul style="list-style-type: none">■ Safely complete the construction of Tilbury Green Power and the portfolio of wind projects
Significant investment in existing assets together with a continued focus on further innovation and performance improvement in generation and trading.	<ul style="list-style-type: none">■ €72 million invested in existing assets■ Strong availability of the generating fleet■ G&WM collaborated with a number of universities, to hone innovation capability■ Trading performance was strong against a backdrop of difficult market conditions	<ul style="list-style-type: none">■ Maintain a high level of performance in both generation and trading■ Prepare for I-SEM
STRATEGIC		
Additional renewable projects while continuing to develop diverse renewable and thermal growth options.	<ul style="list-style-type: none">■ Over 100 MW of wind assets in construction■ Tilbury Green Power on track for completion in 2017■ Acquisition of share in Terra Solar	<ul style="list-style-type: none">■ Construct additional renewable projects, while continuing to develop diverse renewable and transition growth options
The trading of Carrington and the design of new trading processes and wholesale products appropriate to the I-SEM structure.	<ul style="list-style-type: none">■ Carrington has traded strongly since it entered commercial operation■ A team has been mobilised to optimise the interaction with I-SEM	<ul style="list-style-type: none">■ Progress trading and operational capability in readiness for the I-SEM market

ESB NETWORKS



MARGUERITE SAYERS
Managing Director
ESB Networks DAC

Q What were the key achievements in 2016 for ESB Networks?
The first year of the regulatory price review 4 (PR4) for 2016 - 2020 has delivered good progress on the capital and maintenance programmes as set out in the regulatory contract with the Commission for Energy Regulation (CER). A framework for monitoring PR4 performance was also developed during 2016.

ESB Networks is working hard to respond to the changing demands on the network and has developed an Innovative Strategy to design, build and operate advanced networks to provide new flexibilities. The strategy underpins the research, development, demonstration and adoption of innovative technologies. Overall, it aims to provide improved electricity services to customers and accelerate the move to a low-carbon future.

ESB Networks are a customer focused organisation and 2016 has seen an increased range of customer communication channels including an enhanced ESB Networks' website and a stronger social media presence.

Q How does the business help ESB fulfil its strategic and financial objectives?
A key strategic priority for ESB is Advanced Networks. In line with the PR4 programme, ESB Networks strives to efficiently deliver transmission and distribution capital and maintenance projects that fulfil the strategy of being a strong, smart, reliable and affordable network, enabling renewables and electrification.

In 2016, ESB Networks grew its RAB by €122 million, through the delivery of good progress on its transmission and distribution programmes under PR4.

ESB Networks continues to facilitate the roll-out of fibre to towns in Ireland through its contractual arrangements with SIRO, ESB's joint venture with Vodafone.

Q What are the principal challenges ESB Networks faces in the next three years?
■ Safety is a core value in ESB Networks and the business unit is committed to continuously challenge the way it carries out the work to ensure that the safety, health and welfare of employees, contractors, customers and members of the public are protected at all times.
■ ESB Networks will strive to efficiently deliver the critical infrastructure required to support the ongoing growth of the Irish economy within the agreed PR4 capital and maintenance programmes, and developing a framework for ongoing monitoring of PR4 performance.
■ ESB Networks is continuously examining emerging trends and the needs of the customers across the electricity industry and it will develop strategic plans accordingly, in order to effectively position the business to be a recognised leader in the area of energy and environmental sustainability.

OVERVIEW

ESB Networks builds, manages and maintains a transmission and distribution network of over 180,000 kilometres in the Republic of Ireland (ROI). The business invested €373 million (net of capital contributions) in reinforcement and constructing new networks in 2016. During 2016, €117 million was spent on maintaining the existing network.

2016 was the first year of PR4 and ESB Networks has delivered good progress on the approved investment and maintenance programmes demonstrating its commitment towards a safe and reliable network.

ESB Networks has achieved both ISO 55001 and OHSAS certification. These external accreditations are important in providing assurance that the business is being run consistently to high external benchmarks.

FINANCIAL PERFORMANCE

ESB Networks operating profit for 2016 at €314 million is up €27 million on 2015. The increase primarily relates to higher regulated tariff income.

Capital expenditure (net of capital contributions) at €373 million is down by €121 million on 2015. The reduction is related to lower volumes of spend on the transmission network, asset replacement programmes and substantial fleet investment was made during 2015 only. Gross capital expenditure (before capital contributions) in 2016 was €473 million (2015: €555 million).

OPERATING ENVIRONMENT

Economic recovery has continued during 2016 in both the house building and business sectors with both experiencing increased volumes of new connections, up 18% on 2015. Further modest growth is expected in 2017.

The amount of renewables connected to the electricity network in ROI has exceeded 3,200 MW and continues to increase annually. Ireland is on track to achieving the national target of providing 40% of its electricity needs from renewable resources by 2020.



PROGRESS ON STRATEGIC OBJECTIVES

Safety

Safety is a core value in ESB Networks and the business is fully committed to protecting the safety, health and welfare of its employees, contractors,

customers and members of the public who may interact with the network. Recent external independent audits confirm that both the safety standards and culture within ESB Networks have progressed.

Electricity Infrastructure – Investment and Growth

The focus of the 2016 investment in the transmission network was on continuing the reinforcement of the system to facilitate the connection of new renewable electricity generation. ESB Networks also continued to invest in the electricity distribution network to improve reliability of supply and ensure the safety of the network.

- During 2016, three of the five stations that are part of the €400 million South West Project were energised (Ballyvouskill, Knockanure and Ballinanhulla)
- Construction of the new 400kV, 220kV and 110kV substations in Moneypoint are well advanced and energisation will commence in 2017
- Station energisation was completed during 2016 for three 110kV stations to facilitate generation offload at Knockranny, Clogher and Sliabh Bawn
- Substation extensions at Newbury and Bancroft in Dublin were completed to facilitate new demand load
- The first phase installation of 100 MVA of reactor capacity in Poolbeg was completed with the energisation of a 50 MVA unit
- In Ardnacrusha, a new 110kV GIS substation was energised replacing the old air insulated substation
- Network reinforcement and refurbishment expenditure of €160 million included uprate works at Carrickmines and North West projects including Moville, Castlereagh and Killybegs 38kV stations, Cloon to Tuam line works and Tramore to Kilmacthomas 38kV networks
- Mount Misery in County Waterford 38kV Siemens station was retired during 2016 and replaced with a new modular design substation
- Safety programmes during 2016 were delivered to expected targets, including public safety hazard patrols, timber cutting programmes and mitigation works on high exposure MV sites

ESB NETWORKS' CUSTOMERS

ESB Networks continues to improve its service to all electricity customers and suppliers.

During 2016, ESB Networks provided a range of services to electricity suppliers. More than 300,000 site switches were facilitated and over 20,000 new residential and business connections were completed. Also, ESB Networks continued to support customers experiencing financial hardship by installing almost 6,000 Pay As You Go (PAYG) meters. The ESB Networks website was revamped and now includes facilities for online payment and reporting faults online. Overall customer satisfaction with ESB

Networks across a range of activities including meter reading, and new connections continue to be above target, at 80%.

PEOPLE

ESB Networks' employees are central to successfully implementing its business strategy. This is reflected by the importance placed by ESB Networks in 2016 on the ongoing development of all employees through a commitment to on-the-job training. In 2016, ESB Networks continued to recruit new apprentices under the apprenticeship campaign as well as seeking experienced network technicians and electricians. This reflects its commitment to ensuring ESB Networks has the requisite resources and skills to maintain and enhance the network.

SUSTAINABILITY

ESB Networks are committed to facilitating the Irish Government in achieving its target of 40% of energy consumption coming from renewable sources by 2020. A total of 540 MW of renewables was connected in 2016, bringing total renewable MW connected to the grid to over 3,200 MW. ESB Networks plan to continue to connect a further 800 MW of renewable energy in 2017.

WORKING TOGETHER

ESB Networks has always placed a high value on partnership and collaboration. Some examples include:

- ESB Networks has collaborated on the new Public Safety Awareness Campaign (Stay Safe, Stay Clear) through television, radio and digital streams. It continues to partner with the Road Safety Authority (RSA) and engage with schools throughout the country on roads and electrical safety.
- To facilitate the growth of renewables in the system, ESB Networks are engaged in a number of strategic projects with the Electric Power Research Institute (EPRI) allowing structured collaboration with system operators from around the world.
- Innovation through collaboration is an important aspect in the development of ESB Networks' Innovation Strategy. Reserve is a project that ESB Networks is involved in along with eleven consortium partners including Ericsson, looking for a solution to stabilise the system for up to 100% renewables. Currently, there is an operational limit of 55% renewables.

UPDATE ON 2016 PRIORITIES AND PRIORITIES FOR 2017

2016 PRIORITY	2016 PROGRESS	2017 PRIORITY
OPERATIONAL		
Continuation of the strategy to ensure the health and safety of employees, contractors and the public.	■ Safety strategy remains a core value. Recent external independent audits confirm that both safety standards and culture within ESB Networks have progressed in 2016	■ The safety journey will continue to ensure ESB Networks protect the health and safety of employees, contractors and the public
Examine emerging trends in electricity networks across Europe and develop strategic plans accordingly, in order to effectively position ESB Networks for future industry changes.	■ ESB has advanced a number of projects as part of its innovation and Smart Networks Strategy	■ Continue to examine emerging trends in electricity networks across Europe and develop strategic plans accordingly ■ Deliver projects set out under the Innovation Strategy
Launch a website that will facilitate a number of additional services for customers online.	■ Revised website launched in addition to new social media channels	
STRATEGIC		
Deliver the first year of the PR4 capital and maintenance programmes, while developing the framework for ongoing monitoring of PR4 performance.	■ Good progress on the delivery of capital and maintenance programmes as set out in PR4 ■ Developed a framework for monitoring PR4 performance	■ Continue to deliver and monitor performance of PR4 capital and operational programmes
Efficiently deliver the critical infrastructure required to support the ongoing growth of the Irish economy.	■ Good progress on transmission and distribution projects in 2016	■ In line with PR4 contract, efficiently deliver transmission and distribution capital and maintenance projects
To be a recognised leader in the area of energy and environmental sustainability and develop an integrated Smart Networks Strategy to enable national targets to be met.	■ ESB Networks developed its Smart Networks Strategy	■ Continue to examine emerging trends in electricity networks across Europe and develop strategic plans accordingly ■ Deliver projects set out under the Innovation Strategy

OPERATING PROFIT

2016 - €314 million

2015 - €287 million

€27 MILLION

CAPITAL EXPENDITURE

2016 - €373 million

2015 - €494 million

(€121 MILLION)

REGULATED ASSET BASE (RAB)

2016 - €7.5 billion

2015 - €7.4 billion

€0.1 BILLION

NORTHERN IRELAND ELECTRICITY NETWORKS (NIE NETWORKS)



JERRY O'SULLIVAN
Deputy Chief Executive

Q What were the key achievements in 2016 for NIE Networks?

During 2016, NIE Networks delivered £111 million worth of the substantial investment programme approved under the regulatory period 5 (RP5) price control on the refurbishment and replacement of worn transmission and distribution assets to maintain reliability of supply and ensure the safety of the network for customers. Key projects for 2016 included the completion of a new major substation in Belfast and significant progress in the refurbishment of six other major substations.

Further network development was undertaken during 2016 to facilitate the connection of additional renewable generation, including significant construction progress on the 50 kilometre Omagh to Tamnamore 110kV line and on three 110/33kV wind farm cluster substations. Significant further progress was made on a customer meter replacement programme with the installation of circa 100,000 meters during 2016.

In June 2016, NIE Networks submitted the regulatory period 6 (RP6) price control

business plan to the Northern Ireland Authority for Utility Regulation (the Utility Regulator), which sets out NIE Networks' investment plans for the period from 1 October 2017 to 31 March 2024. The submission of the business plan followed extensive planning, analysis and consultation, including engagement with key stakeholders, to ensure that the plan for RP6 delivers benefits for customers and sets the foundations for the future.

Q How does the business help ESB fulfil its strategic and financial objectives?

A key strategic priority for NIE Networks is Advanced Networks, to deliver high quality and affordable electricity networks for its customers both in the Republic of Ireland (ROI) and Northern Ireland (NI). This will include investment to underpin social and economic development, security of supply and the achievement of climate change targets.

NIE Networks investment programmes have contributed to growing the overall ESB RAB by a further £80 million during 2016. In addition, during 2016, NIE Networks has delivered 235 MW of additional network connections to support the target of 40% of renewable energy by 2020.

Q What are the principal challenges NIE Networks faces in the next three years?

The principal challenges facing NIE Networks over the next three years include:

- Achievement of satisfactory outcome with the Utility Regulator on the RP6 price control in June 2017
- Safely and efficiently delivering the major transmission and distribution network investment programmes for the remainder of the RP5 period and RP6
- Safely and efficiently delivering the major investment programmes to facilitate increased levels of renewable generation connections
- Preparing the NIE Networks Connections business for competition when the customer connections market fully opens in early 2018

OVERVIEW

NIE Networks is responsible for the transmission and distribution of electricity from generators to every home, farm and business in NI. NIE Networks employees work 24/7 to plan, build, repair and develop the electricity network and operate the distribution network to keep the lights on for customers. NIE Networks is also responsible for metering and provides metering information to all electricity suppliers. It develops and reconfigures the electricity network to facilitate the connection of further renewable generation.

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

FINANCIAL PERFORMANCE

NIE Networks operating profit for 2016 at €35 million is down €13 million on 2015. Higher regulated tariff income has been offset by the impact of weakening GBP against the euro.

Capital expenditure at €141 million is up €6 million on 2015 due to higher capital investment on the RP5 programme.



PROGRESS ON STRATEGIC OBJECTIVES

A key strategic objective for NIE Networks is the delivery of the network investment plan under the regulatory period 5 (RP5) price control. During 2016, NIE Networks made significant progress in this area. The capital expenditure programme was further ramped up to deliver the outputs specified in the network investment plan for RP5, including investment of £111 million primarily on the refurbishment and replacement of worn transmission and distribution assets to improve the reliability of supply and ensure the safety of the network for customers.

Further investment was undertaken during 2016 to facilitate the connection of additional renewable generation and on a customer meter replacement programme, with the installation of 100,000 meters during 2016.

NIE NETWORKS' CUSTOMERS

Despite customers' expectations of service that continue to increase and a ramp-up in the network investment programme, NIE Networks has continued to manage outages in order to minimise the length of time that customers are off supply. The average number of customer minutes lost due to planned outages was 65 (2015: 66). The average number of minutes lost due to faults in the distribution network was 56 (2015: 65). There was one complaint taken up by the Consumer Council for NI (CCNI) on behalf of customers during the year, a reduction from 4 during the previous year.

Based on customer and stakeholder feedback, NIE Networks plans to deliver a more multi-channel approach to communication and during 2016, a Powercheck facility was launched on NIE Networks' website to provide customers with real-time information on power cuts.

PEOPLE

Ensuring the safety of employees, contractors and the general public continued to be the number one value at the core of all NIE Networks operations. The aim is to provide a zero-harm working environment where risks to health and safety are assessed and controlled and NIE Networks had only one incident during the year (2015: nil), which resulted in lost working time for an employee, showing the commitment of employees to maintaining the highest standards of safety. In recognition of its strong safety focus, NIE Networks won a regional safety award at the All-Ireland Occupational Safety Awards.

NIE Networks won the Chartered Institute of Personnel Development NI Award for Best Employee Engagement Strategy and an employee engagement survey conducted during the year showed good progress since the last survey conducted in 2012, with engagement scores above the industry benchmark.

NIE Networks' annual apprenticeship recruitment programme continued with the intake of apprentices during the year including the highest percentage to date of female apprentices.

SUSTAINABILITY

In 2016, circa 25% of total electricity consumption in NI was generated from renewable sources. During the year, 10 large-scale wind farms, 290 small-scale renewable generation projects and several hundred micro-generation projects were connected to the network, together providing an additional 235 MW of renewable generation. By the end of the year, there was a total of 1,087 MW of renewable generation connected.

WORKING TOGETHER

During 2016, NIE Networks was proud to collaborate with a number of organisations. Some examples include:

- As part of the development of the RP6 business plan, NIE Networks established a Consumer Engagement Advisory Panel, which included representatives from the Utility Regulator, the CCNI and the Department for the Economy to understand the views and opinions of all its stakeholders on the type and level of service they expect and the prioritisation of the delivery of these services within reasonable funding limits. NIE Networks' information and awareness campaign for RP6 is targeting 97,500 people over the RP6 period.
- In accordance with NIE Networks' priority of ensuring the safety of employees, contractors and the general public, NIE Networks works closely with various organisations to achieve this

aim, including the Health and Safety Executive NI, the NI Utilities Safety Group, the Quarry Products Association, the NI Authority for Roads and Utilities Committee, the NI Environment Agency, Business in the Community and membership of various energy networks association health and safety committees.

- NIE Networks seeks to attract, develop and retain highly skilled people through its apprenticeship, graduate, apprentice-to-graduate, university scholarship and sponsorship programmes, in order to address the challenge of ensuring a large enough pool of potential candidates to join the workforce. For example, NIE Networks has engaged proactively with students to consider engineering as a career, through a wide range of outreach initiatives including linking with over 60 schools to promote opportunities from studying science, technology, engineering and maths (STEM) subjects.

UPDATE ON 2016 PRIORITIES AND PRIORITIES FOR 2017

2016 PRIORITY	2016 PROGRESS	2017 PRIORITY
OPERATIONAL		
Ensuring the health and safety of employees, contractors and the general public will continue to be NIE Networks' top priority.	■ One lost time incident ■ Retained OHSAS accreditation ■ Regional safety award at All-Ireland Occupational Safety Awards	■ Ensure the health and safety of employees, contractors and the general public and achieve a zero-harm work environment through implementation of injury and accident-free initiatives
Consistently providing high standards in network performance and customer service.	■ Significant progress in connection of 235 MW renewable generation and delivery of market opening for network connections >5 MW to competition ■ High customer satisfaction survey score following roll-out of Think Customer initiative ■ Continued management of outages	■ Continue to consistently provide high standards in network performance and customer service whilst delivering an intensive investment programme and high level of generation connections ■ Delivery of full market opening for connections
NIE Networks will strive to deliver the requirements of the RP5 price control, delivering cost efficiencies and performance improvements where possible.	■ Substantial capital investment (€141 million) including significant progress in the RP5 programme, in construction of a major transmission line between Omagh and Tamnamore and in the meter replacement programme ■ Employee costs maintained in line with appropriate benchmarks	■ Deliver all remaining requirements of the RP5 network investment programme and continue to deliver cost efficiencies and performance improvements where possible including maintaining employee costs in line with appropriate benchmark
STRATEGIC		
Continuing investment in employees to enhance the organisation's capability through further employee development programmes, increased employee engagement and empowerment and extended educational outreach.	■ Employee engagement survey scores above industry average and Chartered Institute of Personnel Development staff engagement award ■ Leadership capability across all levels enhanced through a variety of training and development initiatives	■ Continue investment in employees through effective employee development and increased employee engagement with focus on encouraging continuous improvement
Engaging effectively with key stakeholders including regulators, renewables industry groups, Confederation of British Industry (CBI) and large energy users.	■ Significant engagement undertaken with customers and other stakeholders to inform investment priorities for RP6	■ Continue effective engagement with key stakeholders
Securing appropriate price controls to enable NIE Networks to deliver its mission to distribute electricity in a safe, reliable, efficient and environmentally aware manner.	■ Submission of RP6 business plan to the Utility Regulator	■ Achievement of satisfactory outcome to the RP6 price control

OPERATING PROFIT

2016 - €35 million

2015 - €48 million

(€13 MILLION)

CAPITAL EXPENDITURE

2016 - €141 million

2015 - €135 million

€6 MILLION

REGULATED ASSET BASE (RAB)

2016 - £1.4 billion

2015 - £1.3 billion

£0.1 BILLION

ELECTRIC IRELAND



JIM DOLLARD
Executive Director
Business Service Centre (BSC)
and Electric Ireland

Q What were the key achievements in 2016 for Electric Ireland?
During 2016, Electric Ireland continued to deliver value to its customers, offering price reductions, improved customer experience through enhanced digital service capability and innovative products.

In May 2016, Electric Ireland became the first Single Electricity Market (SEM) supplier to offer enduring long-term savings to its residential electricity and gas customers. All Electric Ireland residential customers can benefit from savings of up to 8.5% based on certain behaviours such as online billing and direct debit.

Electric Ireland reduced standard unit rates for residential electricity customers by 6% from 1 June 2016, equivalent to an average saving of €58 per year on an average customer bill. In addition, the gas unit prices were reduced by 5% from 1 October 2016, delivering an annual saving of €39 for an average residential customer.

Electric Ireland has increased its residential market base and established its position in Northern Ireland (NI) capturing a 3.6% share (27,500 customers) of the market. At the same time, Electric Ireland has progressed the development of its product offerings through the introduction of residential solar power on a

trial basis and the further development of smart and connected home products, which will be in a position to launch in 2017.

Q How does the business help ESB fulfil its strategic and financial objectives?
One of the key priorities identified by ESB to deliver on its goal of being a Strong, Diversified Vertically Integrated Utility is to operate a Supply Business of Scale. During 2016, Electric Ireland continued to deliver on this objective, maintaining a market leading position of 37% of the all-island market share.

Equally, Electric Ireland has consistently delivered operating profits, which help the organisation maintain its investment grade credit rating and provides funds for future investment. This has been achieved through the active management of commodity exposures, which has allowed Electric Ireland to deliver on its financial objectives while at the same time introducing price reductions for customers.

Q What are the principal challenges Electric Ireland faces in the next three years?
■ The principal challenge facing Electric Ireland over the next three years is to maintain its leading position in both the business and residential markets during a time of profound uncertainty in the operating environment. The extent of the competitive challenge is evident in the current level of switching in its residential electricity sector together with the arrival of new competitors and the increased activity of existing competitors.
■ Electric Ireland will continue to face this challenge through a combination of competitive pricing and innovative product offerings in all markets. The introduction of new technologies coupled with significant market reform will demand new and innovative thinking, agility and operational excellence to meet the threats and opportunities that this market uncertainty will present.
■ Electric Ireland is preparing to face the challenge of the Integrated Single Electricity Market (I-SEM). While I-SEM will bring a new level of complexity to the energy market, Electric Ireland will continue to place customers' interests at the forefront.

REVENUE

2016 – €1.9 billion

2015 – €2.1 billion

(€0.2 BILLION)

OPERATING PROFIT

2016 – €72 million

2015 – €44 million

€28 MILLION

OVERVIEW
Electric Ireland is the retail arm of ESB, supplying electricity, gas and energy services to customers across the island of Ireland. With over 1.4 million customers and an electricity all-island market share of 37%, Electric Ireland serves all market segments, from domestic households to large industrial and commercial businesses, in both the Republic of Ireland (ROI) and NI. With a strong focus on customer service, providing value for all customers and contributing to communities across the country, Electric Ireland is recognised as a leading retail brand by Irish consumers and businesses.

FINANCIAL PERFORMANCE
Revenue in Electric Ireland in 2016 was €1.9 billion, a decrease of 10% compared to 2015 driven by reduced unit rates for residential electricity and gas customers in addition to a reduction in market share. Electric Ireland's overall market share decreased by 1% during 2016 to 37% primarily as a result of customer losses in the residential market sector.

Electric Ireland reported an operating profit of €72 million, which represents an operating profit margin of 3.5% (excluding non-cash mark to market accounting adjustments). This improvement on 2015's financial performance was primarily driven by lower energy costs in 2016, and a once off charge in 2015 relating to regulated renewable income. The benefit of these lower energy costs were passed onto customers through reductions to the electricity and gas unit rates in June and October 2016 respectively.

OPERATING ENVIRONMENT
Electric Ireland operates in one of the most dynamic and competitive markets in Europe, evidenced by the number of new suppliers who entered the market in recent years and the high level of customer switching trends. Electric Ireland has continued to compete effectively in this environment through continued focus on competitive pricing and innovative offerings.

Electric Ireland passed on significant savings to customers in the last number of years when fuel prices have fallen.

PROGRESS ON STRATEGIC OBJECTIVES
Electric Ireland has taken significant steps in 2016 to deliver on its strategic objective of being a Supply Business of Scale. The introduction of a new enduring reward product for its loyal customers, Stay Happy, is an innovative approach to deliver long-term value to residential customers in a market dominated by short-term value propositions. This innovative approach aims to deliver a leading and stable residential market share in the core market. Electric

Ireland continues to provide competitive offerings, excellent customer service and new and innovative products to all homes and businesses.

During 2016, Electric Ireland established its brand in the NI market and has progressed the development of its smart and connected home offering which will be ready to launch in 2017.

ELECTRIC IRELAND'S CUSTOMERS
The customer is central to everything that Electric Ireland does. In addition to reducing prices and launching new and innovative products, Electric Ireland continues to deliver customer service improvements to simplify and improve the customer experience. Maintaining the focus on customer empowerment and self-service, Electric Ireland further developed its digital service capability during 2016 across all stages of the customer journey with the introduction of:
■ Two new mobile accessible online switching applications to make it easier for both residential and business customers to join
■ A new online sign-up process for customers to avail of Stay Happy
■ New easier sign-up process for e-billing registrations
■ New online appointment booking for a gas boiler service

Electric Ireland also delivered a range of new tariff solutions for business customers to ensure it adapts to changing customer requirements and continue to deliver the best value in the market.

A continued focus on the residential and business customer experience and improvements in the digital capability of the business will remain one of Electric Ireland's top service priorities for 2017.

WORKING TOGETHER
During 2016, Electric Ireland was proud to collaborate with a number of organisations across sporting, social, and charitable sectors. Some examples include:
■ Promoting young people in sport through the sponsorship of the GAA minor hurling and football championships helped to raise its profile, giving these young players a greater platform on which to perform. The sponsorship of Team Ireland for the Rio Olympics shone a spotlight on Olympic athletes giving them an opportunity to share their stories and inspire the Irish public.
■ The continued involvement as Official Energy Partner to Electric Picnic has enhanced the experience for festival goers with Electric Ireland.
■ Electric Ireland's national sponsorship of Darkness into Light for the fourth year saw the participation rate increase to 130,000 people raising over €3 million for Pieta House. Darkness into Light is a movement established by Pieta House to raise funds in support of its work in the area of suicide and self-harm prevention.

PEOPLE
A key element in the successful delivery of Electric Ireland's strategic and operational priorities is the capability, knowledge and performance of employees. A strong focus on employee development and targeted recruitment across a range of disciplines and activities will ensure that Electric Ireland continues to provide competitive offerings, excellent customer service and new and innovative products to meet customer needs.

In 2016, Electric Ireland recruited 22 new employees with a range of skills and experience, including digital analytics, digital expertise and marketing, to support the business in the delivery of its strategic objectives.

SUSTAINABILITY
Electric Ireland is conscious of operating its business in a sustainable and environmentally responsible way. The internal business activities are certified to ISO 14001 standard and 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.

Electric Ireland also delivered energy savings as part of the National Energy Efficiency Obligation Programme. In 2016, Electric Ireland assisted local authorities and housing associations around the country to improve the energy efficiency of social housing through a variety of measures including attic and wall insulation, heating system improvements and heating control upgrades. Electric Ireland is rewarding customers who undertake measures to improve the energy efficiency of their homes through its Energy Efficiency Incentive Scheme, which gives customers additional discounts on their bills. Electric Ireland has pioneered the introduction of Smart Heating Controls, offered as part of price plans to assist customers in managing their energy requirements. Electric Ireland has also assisted business customers in reviewing their energy consumption and significant savings have been made through the introduction of new technologies ranging from lighting upgrades to energy consumption improvements.

UPDATE ON 2016 PRIORITIES AND PRIORITIES FOR 2017		
2016 PRIORITY	2016 PROGRESS	2017 PRIORITY
OPERATIONAL		
Continue to innovate for the benefit of customers through the delivery of new smart and innovative products and services.	■ Introduced a new enduring reward product for its loyal customers, Stay Happy	■ To continue to innovate for the benefit of customers through enhanced communication of value proposition and delivery of new products and services
Roll-out of enhanced interactive voice response (IVR) system.	■ The enhanced IVR system went live in January 2016, significantly improving the customers' self-serve capability	■ Deliver new residential and business online portals, enhancing self-serve capabilities for customers across a range of functions and transactions
Continue to enhance the value offered to all customers (existing and new) and to honour the commitment to pass on further energy price reductions where possible.	■ Residential electricity price reduction of 6% from 1 June 2016 ■ Residential gas price reductions of 5% from 1 October 2016 ■ Stay Happy campaign launched	■ To continue to focus on the management of energy and operating costs to deliver Electric Ireland customers the best value products in the market
Early identification of customers with a higher risk of having payment difficulties and be proactive in offering suitable products and payment plans.	■ Range of products and payment plans in place coupled with proactive early interaction with customers ■ Disconnections continued to fall in 2016 less than 25 per 10,000 customers disconnected	■ Effective credit management and control ■ To continue communication with the Money Advice and Budgeting Service (MABS) and Saint Vincent de Paul to deliver solutions to vulnerable customers
STRATEGIC		
Ongoing focus on customer convenience, empowerment and control through continued development of the digital service capability across the entire customer experience journey.	■ Progress outlined in Electric Ireland's customers' section	■ Ongoing focus on customer convenience, empowerment and control through continued development of the digital service capability across the entire customer experience journey
Maintain Electric Ireland's market leading position through the delivery of its energy efficiency targets and providing customers with new products and services to help reduce their carbon footprint.	■ Electric Ireland is on track to achieve its energy efficiency targets and has continued to seek new ways to support customers in reducing their carbon footprint ■ During 2016 Electric Ireland was successful in its tender for EirGrid's residential demand response programme which aims to help customers manage their consumption levels	■ Play an active role in delivering ESB Group's decarbonisation objective by continuing to lead the market in delivery of energy efficiency targets
Ensure that the customer interest is central to the design of I-SEM and the Smart Metering Programme.	■ Electric Ireland has maintained customer interests at the forefront when responding to I-SEM market design consultations to ensure the customer sees the benefits of the Irish electricity market integrating with the EU energy target model	■ Ensure Electric Ireland is prepared for transition to I-SEM ■ Continued growth of residential market share in NI by offering cost competitive solutions for customers

INNOVATION



PAUL MULVANEY
Executive Director
Innovation

What were the key achievements in 2016 for Innovation?

In 2016, the focus for Innovation has been two-fold: supporting the development of new business opportunities across ESB and addressing the competitive challenges in the Telecoms and ESB International businesses. Both of these objectives have challenged our teams to come up with new customer offerings.

Highlights in 2016 were ESB International's key role, with Generation and Wholesale Markets (G&WM) and ESB Networks respectively, in successfully commissioning the Carrington Plant for commercial operation and restoring power to the Aran Islands using an updated variation of the innovative sub-sea cable repair solution. A further highlight in 2016 was the successful launch of the Smart Energy Services business, which is already delivering services to customers across Ireland.

Our joint venture (JV) with Vodafone, SIRO, is continuing to deliver on its commitments and has recently become the largest fibre-to-the-building (FTTB) supplier in Ireland with over 50,000 premises passed. SIRO is also actively engaged with the Irish Government's National Broadband Plan and is considering with its shareholders whether to bid for one or more lots in the competition.

How does the business help ESB fulfil its strategic and financial objectives?

Innovation is working with the other ESB businesses to identify the likely impact of the transformation we are seeing in the energy industry and to assess the threats and opportunities, as a result of those changes. We then work with our colleagues in ESB and other external partners to develop responses to those threats and opportunities so that we can improve ESB's financial performance.

By identifying our competitive advantage and discovering future value early, we can strive to be the most customer focused and efficient company in the market while maintaining the financial strength of the Group.

What are the principal challenges Innovation faces in the next three years?

The areas Innovation are working in are changing with new competitors, technologies and business models. Key areas of focus are distributed generation, storage technologies and new business models (including battery technologies) and changing customer needs (prosumers). We have teams assessing the implications of those changes, the likely business solutions that will be most successful and then how to implement them.

OVERVIEW

Innovation continues to work with partners internally and externally to deliver new propositions for customers that support ESB's aim to lead the transition to a low-carbon future. Innovation is continuing to invest in and develop new business opportunities which will deliver benefits for customers and provide new revenue streams for ESB.

Innovation will continue to promote a spirit of innovation through various cross Group initiatives including the ESB Staff Innovation Recognition Awards, strategic road map development and workshops focused on ideation and new product development.

Innovation's financial performance is included as part of Other Segments, see note 2 in the financial statements.

OPERATING ENVIRONMENT

The markets for the Innovation businesses remain competitive.

ESB International remains a well-regarded international consultant and continues to win multi-year contracts in both existing and new markets. ESB International celebrated 40 years providing services in Bahrain this year and has marked that milestone by winning substantial new contracts with new and existing customers in the region.

The Irish fibre and towers wholesale market in which Telecoms operates continues to see further consolidation. Telecoms is continuing to work with its customers to build long-term relationships to provide their essential network services, utilising its national tower infrastructure integrated with a national fibre network. Telecoms continues to build its product portfolio with a microwave radio solution being added to the suite of offerings.

During 2016, Novusmodus continued to invest in opportunities in the maturing clean technology and low-carbon technology sectors. The most recent investment is in Endeco Technologies, a fast-growing Irish company involved in the fast frequency response market. Novusmodus is now increasing its focus on realising value in its

investments to complement the ongoing transfer of valuable sectoral and industry knowledge, which is increasingly useful in the evolution of the ESB Group Strategy.

ecars has now completed a migration of all its infrastructure onto a new charge point management system and continues to work with a range of stakeholders across ROI and Northern Ireland (NI) to encourage electric vehicle adoption – against the backdrop of electrification of transport becoming increasingly important if national emissions targets are to be achieved. ecars has also developed relationships with stakeholders in Great Britain (GB) and is focusing more attention on that market as the number of electric vehicles in GB ramps up significantly.

PROGRESS ON STRATEGIC OBJECTIVES

Sustainable Innovation is a key strategic objective across the Innovation business lines, with Innovation also playing an active role in promoting this objective across the other business units in ESB.

Innovation is focusing on the following areas in relation to Sustainable Innovation.

Technologies

ESB is keenly aware of the technology changes happening now in the energy industry and the changing demands from energy customers. The Technology Innovation Unit is a dedicated team working with other teams across ESB to develop the solutions which will meet those needs into the future. This team has coordinated the development of strategic road maps for a number of key areas across ESB, which informs new areas of business opportunities.

ESB's People Power the Future

ESB remains committed to supporting its people in bringing new thinking to the organisation and that was borne out by the most recent ESB Staff Innovation Recognition Awards.

INNOVATION'S CUSTOMERS

Telecoms recognises the challenges that its customers face from competition and consolidation and is striving to build long-term commercial relationships which meet those needs, as evidenced by the long-term agreement concluded this year with Three Ireland to secure a substantial portion of their network footprint on a multi-year deal.

In 2016, ESB International has mobilised on-site with new customers in both the Middle East and Europe and is updating its technical solutions to ensure that they change to meet the customers' changing needs.

Smart Energy Services was launched in 2016

to address the needs of large energy users who are actively trying to manage their energy consumption. Smart Energy Services is now providing services to a number of these customers and will continue to expand this offering in 2017 and beyond.

PEOPLE

With the development of the Smart Energy Services business and the increasing focus on development and delivery of strategy road maps, Innovation has continued to add new resources to the team with new skills and expertise to better inform the delivery of its business requirements as well as those of the Group.

WORKING TOGETHER

New collaborations are being developed to expand into new areas and grow revenue streams, deepening Innovation's offering to commercial customers. Some examples include:

- Innovation has established the X_Site facility at Dogpatch Labs in Dublin. Teams from ESB are working in an innovative environment with companies in the digital and technology area to develop new energy product offerings and services which are focused on customers' requirements for greater engagement and transparency.
- In October 2016, ESB hosted Ireland's first energy Hackathon, The Big Energy Hack, at Dogpatch Labs. A total of 150 delegates from a diverse range of backgrounds spent time discovering and exploring innovative customer solutions based around a low-carbon future.
- Following on from the inaugural awards in 2015, ESB celebrated its own innovators through the ESB Staff Innovation Recognition Awards in November 2016. These awards recognise the achievements of employees who have demonstrated new thinking and developed creative solutions to challenges across the Group.

UPDATE ON 2016 PRIORITIES AND PRIORITIES FOR 2017

2016 PRIORITY	2016 PROGRESS	2017 PRIORITY
OPERATIONAL		
Both ESB International and Telecoms will continue to support their external customers and will seek to increase their revenues by developing new products for existing and new customers.	■ ESB International has had significant customer wins in the Middle East and Europe ■ Telecoms concluded a multi-year agreement with Three Ireland and launched a microwave radio product to expand its offering to customers beyond the fibre network	■ ESB International and Telecoms will continue to support their external customers and seek to increase their revenues by developing new products for existing customers
Novusmodus will continue to manage and support its investment portfolio building value for ESB both financially and in the development of new products and services.	■ Novusmodus has made additional investments in its portfolio and has begun preparing a number of investments for realisation ■ Work with Novusmodus investees has supported the launch of Smart Energy Services business as well as a number of other collaboration initiatives	■ Novusmodus will focus on realising value in its investment portfolio as well as supporting the development of new business options for ESB
ecars will begin the implementation of a commercial offering in its national charge point infrastructure while exploring other opportunities in the electromobility sector outside Ireland.	■ ecars has been engaged in an extensive process with stakeholders to support electric vehicle adoption in Ireland including the implementation of a commercial infrastructure ■ ecars has made significant progress on developing a competitive position in GB	■ ecars will begin the implementation of a commercial offering in its national charge point infrastructure while expanding its services in GB subject to regulatory decisions
STRATEGIC		
Technology Innovation Unit will introduce new commercial products to ESB's core markets to respond to changing customer requirements.	■ Strategic road maps have been developed and are now being delivered ■ Smart Energy Services has been launched and is providing services to customers	■ Smart Energy Services will expand its offering in both ROI and UK ■ New products and services will continue to be launched to support changing customer requirements
SIRO will continue to accelerate its unique product roll-out.	■ SIRO now has the most extensive fibre-to-the-building offering in Ireland and is continuing to build at pace ■ SIRO now has four national retailers signed up to provide its product set	■ SIRO will continue to accelerate its unique product roll-out ■ SIRO will evaluate opportunities to participate in the National Broadband Plan
Continue collaboration with external partners.	■ X_Site established and collaboration ongoing	■ To continue collaboration with external partners

INNOVATION BUSINESS LINES		
ESB International ■ Offers a full range of engineering, operations and maintenance solutions, as well as consultancy services to the global energy market	Telecoms ■ Owns fibre-optic broadband network and a network of independent mobile phone towers ■ SIRO, fibre-to-the-building JV with Vodafone	ecars ■ Operates the national charging infrastructure for electric vehicles and provides commercial services in the electromobility sector internationally
Novusmodus ■ €200 million clean technology and renewable energy fund that invests in renewable energy and energy efficiency sectors	Technology Innovation Unit ■ Supports development of a range of technologies and business models to meet changing energy customer and market needs	Smart Energy Services ■ Provides energy management services to large energy users in the Republic of Ireland (ROI) and the United Kingdom (UK)

CORPORATE SOCIAL RESPONSIBILITY

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OVERVIEW



PAT NAUGHTON
Executive Director
Group People and Sustainability

What were the key achievements in 2016 for Group People and Sustainability?

Building on the introduction of our new employment model in 2015, our focus shifted in 2016 to embedding this model and the renewal of our workforce. For ESB this maintains the sustainability and integrity of a market-based and future focused pay model and for employees it delivers positive pay movement and significant opportunities for career development into the future.

In 2016, we recruited 84 new graduates in the area of engineering, finance, human resources, information technology and marketing. The intake from these programmes together with the ongoing investment in training and development for existing employees will allow us to acquire and nurture critical skills. Our strategic resource planning process ensures we do this in a way that protects our capability in a sustainable way.

How does the business help ESB fulfil its strategy and financial objective?

ESB is a skills organisation. The people who work for ESB are its greatest resource. Everything from the infrastructure we build, to the financial investment that facilitate those projects, through to the service we offer our customers depends upon the skill and capability of our people. The focus for Group People and Sustainability at ESB is to ensure we have the right people with the right skills in the right places to deliver our business strategy and financial objectives.

What is the principal challenge your business faces in the next three years?

Against a background of an increasingly competitive employment market and a rapidly changing energy industry, the key challenge is to ensure that we continue to have a workforce with all the skills and capabilities necessary to deliver on the ESB Group Strategy objective of developing an Engaged and Agile Organisation.

I would like to acknowledge the contribution of all of our people across the Group to the continued success of our business in 2016 in a safe and efficient manner. The efforts of our people and their dedication to our customers ensures we can deliver a reliable service that is value for money, while becoming increasingly sustainable over time. The safety of our employees, our contractors, our customers and members of the public is a core value for us and all our operations are informed by adherence to the highest standards of safety to ensure workplaces that are incident and injury-free.

As the nature of energy production evolves so rapidly, our need for a competent, innovative and skilled workforce remains a business priority. The introduction of a new employment model in 2015 has enabled the recruitment of the next generation of ESB employees. In an employment market that is highly competitive with skills shortages developing in key technical areas, this new approach is allowing us to compete successfully, attracting appropriate talent and offering high quality employment and career focused development.

We recognise that inclusive and respectful workplaces are key to retaining talent, ensuring diversity and innovation, which will drive our business forward. We are committed to this through our employee engagement and development initiatives and through our Health and Wellbeing programmes supporting the physical and mental health of our employees.

In 2016, ESB was awarded the Chambers Ireland Award for Overall Excellence in Corporate Social Responsibility (CSR). This award recognises our track record as a good corporate citizen. We have a long history of community involvement and doing societal good. Our business operations have always been focused on doing the right thing and this has been a key factor in the success of the Group. This success has in turn allowed us to have a deeper CSR impact in the communities within which we serve through our partnerships with organisations through our Energy for Generations Fund. In 2016, we supported the efforts of a number of organisations across Ireland in the areas of suicide prevention, homelessness and education. The award also recognises the CSR impact of our employees through the operation of our social justice fund, ElectricAid and the volunteering efforts of our people. In 2016 alone, our employees recorded a total of over 30,000 volunteering hours.

We are committed to the highest standards of environmental management and to proactively addressing the challenges of climate change. We implement programmes across our operations to promote energy and resource efficiency, and develop new, environmentally driven products and process innovations and new business opportunities.

Pat Naughton

Pat Naughton,
Executive Director
Group People and Sustainability

SAFETY

OVERVIEW

ESB's Board, management and employees are committed to protecting the health and safety of employees, contractors and the people it serves. Safety is a core value for the Group. The safety of employees, contractors, customers and members of the public, arising from its actions and activities always comes first. ESB believes that all operational processes can be designed and operated in an inherently safe manner. This belief guides the approach to safety across all business activities and is reinforced through strong and visible leadership throughout the Group.

The Chief Executive has overall responsibility for the management of health, safety and wellbeing in ESB. The ESB Group Safety Statement, as approved by its Board, sets out the overall policy and general arrangements in ensuring the health, safety and wellbeing of all employees. Functional responsibility is shared with all senior management and, in turn, with each manager, supervisor, team leader and every employee. The Board has a Health, Safety and Environment Committee, which supports the Board's monitoring and governance of health, safety and wellbeing. Further details of the Health, Safety and Environment Committee are outlined on page 82.

All ESB business units have safety management systems in place, many of which are certified to the International OHSAS 18001 standard or equivalent. ESB rigorously enforces safety policies and standards to achieve the ultimate target of an incident and injury-free environment.

SAFETY PERFORMANCE IN 2016

The safety programme in 2016 has focused on the implementation of the Safety Leadership Strategy based on the four pillars of leadership, competence, compliance and engagement. Each business area models its annual health

and safety programmes and annual safety improvement plans on these four pillars. Health, safety and wellbeing performance is managed through a key performance indicator process. See Lost Time Injuries (LTIs) set out in the table below.

Regrettably, there were two fatalities to members of the public in 2016. These included a road traffic incident in which a member of the public was killed following a collision involving an ESB employee on a work related journey. The second incident was a fatality to a non-ESB contractor who was cutting timber for a third party when they made inadvertent contact with an overhead electricity line.

LOST TIME INJURIES (LTIs)

The number of LTIs in 2016 was 72 (2015: 58). While the majority of these injuries were of low

severity, ESB continues to focus on reducing risks in the business that give rise to injurious incidents. The most common causes of LTIs are slips and trips, handling, lifting and use of tools and equipment. LTIs continue to be a key focus for the Group. Manual handling training programmes are provided to all employees to reduce the risks of LTIs.

HIGH-POTENTIAL INCIDENTS

In addition to focusing on LTIs, ESB categorises all injurious incidents and near misses with a particular focus on high-potential incidents that could lead to more serious outcomes. All high-potential incidents and LTIs are investigated to determine the root cause of each incident. The most significant safety risks arising from high-potential incidents for ESB are electricity, driving and transport, working at height and use of tools and equipment.

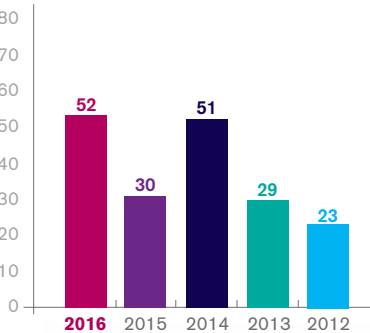
Key initiatives in 2016 included:

- ESB focused on encouraging every employee to record a good catch. A good catch is when a person positively intervenes after seeing something unsafe. Good catches are a key element in helping ESB achieve an incident and injury-free workplace. ESB plans to build on this progress by setting a more challenging target for 2017 to record 10,000 good catches across the Group.
- ESB commenced a focused programme of monthly senior manager safety conversations with employees and plan to extend this in 2017.
- ESB undertook a comprehensive pilot of a new programme designed to drive a renewed commitment to the elimination of all incidents and injuries in ESB. The Safety Culture Change Programme was piloted at two locations in both Generation and Wholesale Markets and

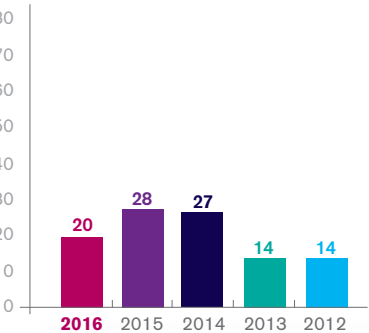
- ESB Networks. It is currently being evaluated to determine the nature and extent of the roll-out of the programme to the rest of the Group.
- ESB continued to make progress in 2016 on improving its safety performance through delivery of specific safety strategies in each business area, combined with a focus on key risk areas.
- Work continued on the implementation of a new, risk-based health, safety and wellbeing function with centres of competency to drive a best practice approach across all key risk areas. ESB promotes an open safety culture, which is supported by regular safety communications and briefings for employees on health, safety and wellbeing matters.
- ESB is proud to partner with the Institute of Advanced Motoring, which certifies drivers in the Group as advanced drivers, deepening its commitment to safer and smarter driving.

ESB LOST TIME INJURIES

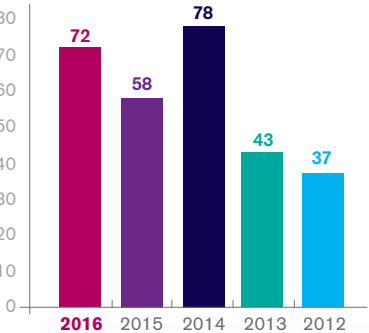
Employee LTIs



Contractor LTIs



Total LTIs



PEOPLE

ESB PEOPLE STRATEGY
The capabilities and commitment of ESB’s employees helps to set ESB apart. In 2016, the ESB People Strategy continued to provide the focus and direction for many human resource initiatives and actions. The strategy is designed to support the overall ESB Group Strategy objective of developing an Engaged and Agile Organisation. In order to achieve this objective the following four areas are focused on:

- Developing people
- Employee health and wellbeing
- Diversity and inclusion
- Employee engagement

DEVELOPING PEOPLE
There are a number of integrated human resource processes embedded in the organisation which ensures that ESB delivers its Group Strategy.

Resource Planning
Resource planning in ESB focuses on identifying the number of employees required and the capability these employees have for the successful delivery of ESB’s Group Strategy. During the process, the gap between the current number and capability and future requirements is identified. Action plans are agreed and implemented to ensure that these gaps are bridged.

Employee Development
ESB is committed to developing all its employees so that they have the skills and competencies to be effective in their current role and to build a career in the organisation based on their requirements and the organisation’s requirements. Building employee capability continues to be a strategically important activity as ESB seeks to manage its different business environments and the challenges each one poses. The Group’s Annual Performance and Development Process provides the platform for the identification and delivery of targeted learning and development solutions. Effective development is based on specified competencies that align with the needs of each individual and the Group.

Manager Development
ESB continued its investment in developing the skill set of its managers in line with the Management Development Framework (MDF) and a refreshed Management Development Policy was approved during the year.

Key initiatives in 2016 included:

- A three-day Leadership Communications Programme was completed during the year, with a focus on performance conversations skills, for almost 800 middle and front-line managers.
- ESB supports managers and employees in undertaking external open programmes in business schools in Ireland and Europe.
- The Chartered Institute of Personnel and Development (CIPD) accredited Human Resource Management (HRM) for Line Managers Programme, successfully passed its annual audit in September 2016. As an outcome, ESB continues to be an accredited CIPD centre.
- ESB continues to invest in performance coaching, using both trained internal and external coaches. A renewed Coaching Strategy and Coaching Policy were put in place in 2016.

Graduate and Apprentice Recruitment and Development
A total of 84 new recruits (from all disciplines) commenced a graduate programme in 2016. The development programme includes a centrally managed induction event, work assignments, off-the-job business specific training, personal skills development and mandatory training, supported by a mentoring relationship.

ESB also recruited 76 new apprentices in 2016 as part of its strategic goal to add at least 300 apprentices to the Group between 2015 and 2020.

EMPLOYEE HEALTH AND WELLBEING
ESB is strongly committed to supporting employees in maintaining good health and wellbeing. ESB’s Health and Wellbeing Programme is focused on supporting employees to reach their full potential in the workplace through the provision of proactive, preventative and early intervention health and wellbeing services. It is focused on providing proactive health programmes that offer information and advice to employees to help them to create and maintain a healthy lifestyle. The programme provides effective support as employees face ill health and other personal life challenges through an occupational health medical service, an Employee Assistance Programme, psychological counselling and through a range of other support measures.

ESB’s employee health and wellbeing focus for the year has been on:

- Promoting increased physical activity through competitions and get active health challenges
- Revamping the ESB health and wellbeing website, providing easier access and regular updates on health topics
- Extending the suite of available proactive health programmes

Proactive Health Programme
ESB’s proactive programmes are focused on prevention and keeping employees well by providing opportunities for them to lead healthier and more active lives. While it is recognised that stress may be an integral part of everyday life, the availability of active workplace resilience programmes are crucial to supporting employees in being psychologically strong enough to deal with these challenges while minimising the impact on their wellbeing. Some of the programmes and initiatives available to ESB employees during the year were:

- Seminars and workshops for employees on positive mental health for teams, eating for energy, back care and financial management
- A Pedometer Challenge competition where teams across the ESB took part in the four-week challenge
- Cardio-vascular and bowel screening programmes along with a flu vaccination programme

DIVERSITY AND INCLUSION
ESB’s firm commitment to working towards a more consciously inclusive workplace continues. Having a diverse and inclusive work environment plays an increasingly important part in ESB’s ability to attract, retain and develop key skills and talent.

As part of ESB’s diversity and inclusion strategic priorities, the aim is to create and provide a positive and inclusive work environment through building understanding and awareness of the benefits of a diverse and inclusive workforce for the individual and the organisation. ESB’s diversity and inclusive policies are regularly reviewed, in line with legislation and best practice and aim to support a culture of inclusion, respect and dignity for the individual in the workplace and for the customers it serves.






Key initiatives in 2016 included:


- ESB celebrated diversity of cultures in the workplace with employees from over 35 different nationalities.
- Continuing to exceed the 3% National Disability Authority (NDA) target of employment of employees with disabilities.
- Promoting science, technology, engineering and maths (STEM) career options for females in partnership with Engineers Ireland and supported through internal and external awareness.
- Launch of BeMe@ESB, ESB’s lesbian, gay, bisexual and transgender (LGBT) Employee Network.
- Business unit diversity groups that continue to raise awareness at local level by integrating diversity and inclusive practices for both employees and customers such as Electric Ireland’s SPARKS programme for 2016.

EMPLOYEE ENGAGEMENT
ESB provides information to its employees in a variety of ways, including its intranet sites, email, twitter, social media, text and video messages as well as through business unit specific briefings.

ESB has evolved in its approach to employee communications to focus more on dialogue and engagement. It has introduced communication channels that facilitate employees voicing their opinions. In 2016, ESB launched a brand new employee intranet, the Hub, which allows for content to be posted by employees and for comments to be posted on news.

Moving forward in 2017, ESB will embark on a Group wide programme to engage its people with its purpose as an organisation, building commitment and engagement involving all ESB employees in enabling a brighter future for ESB customers.

		2016	2015
Average Number of Employees		7,597	7,305
Female		22%	22%
Management Level Female		19%	19%
Full Time		94%	94%
Employees with Disabilities		5%	5%

 Average number of employees by business unit is included in note 8 of the financial statements.

SUSTAINABILITY

PROGRESS ON SUSTAINABILITY OBJECTIVES

ESB prepares an annual sustainability report in line with the global sustainability reporting guidelines, GRI G4. The report content is based on the issues of greatest material importance to ESB and its stakeholders as determined by the outcomes of stakeholder engagement. During 2016, ESB undertook a significant engagement with stakeholders via an external agency. The output and learning from this engagement will inform the approach and disclosure in subsequent sustainability reports. A copy of the sustainability report is available from the ESB website, www.esb.ie

ESB's sustainability endeavours continued on a variety of operational fronts during 2016. The aim is to facilitate a transition to a low-carbon future by focusing on four key areas, as detailed in the table below:

STRATEGIC FOCUS	PROGRESS DURING 2016
Development of low-carbon generation portfolio <div>■ Investing and innovating in new low-carbon and renewable technologies such as solar, wind and biomass, as well as high efficiency transition technologies such as combined cycle gas turbines (CCGT)</div>	<p>Carrington Plant, an 885 MW CCGT, entered commercial operation. The Carrington Plant will be one of the most efficient thermal plants in the Great Britain (GB) market, producing enough electricity for over one million homes and businesses.</p> <p>Raheenleagh Wind Farm, a 35 MW joint venture (JV) with Coillte Teoranta, was successfully completed.</p> <p>Good progress was made on the construction of Eglish Wind Farm (15 MW), Crockdun Wind Farm (12.5 MW), Cappawhite Wind Farm (50 MW), Moneypoint Wind Farm (17 MW) and Castlepook Wind Farm (17.5 MW).</p> <p>Kingspan ESB installed over 1,200 kW of new rooftop solar projects and Generation and Wholesale Markets (G&WM) invested in Terra Solar, an Irish solar development company.</p> <p>Tilbury Green Power made good progress on the construction of the 40 MW waste wood to energy plant.</p>
Energy efficiency and affordability for customers <div>■ Making the electricity network smarter and more resilient so that it can handle more renewable generation and distributed energy resources, and accommodate changing weather patterns</div>	<p>Maintaining affordability by introducing a further 6% reduction in standard unit rates for residential electricity customers from 1 June 2016 and a 5% reduction in gas unit prices from 1 October 2016.</p> <p>Through the energy efficiency schemes that Electric Ireland offer customers, almost 200 GWh of energy has been saved in 2016.</p> <p>Electric Ireland's disconnection rate of less than 25 per 10,000 customers continues to reduce year on year.</p>
Develop resilient networks and facilitate renewables <div>■ Giving customers the tools to manage their own energy usage more efficiently</div>	<p>Almost 800 MW of renewables were connected to the network on an all-island basis during 2016, bringing total renewable connections to almost 4,400 MW across the island of Ireland.</p>
Develop opportunities through emerging technologies to facilitate the decarbonisation of society <div>■ Enabling the removal of carbon from wider society by advocating for and supporting the electrification of heat and transport</div>	<p>ecars division has installed a new Charge Point Management System (CPMS) to enable the streamlined management of 1,200 public charge points. ecars are looking at opportunities for the provision of electric vehicle charging services to decarbonise taxi services and long distance travel by car.</p> <p>SIRO, ESB's JV with Vodafone has rolled out high speed fibre broadband technology to over 50,000 premises during 2016 as part of its first phase deployment of the fibre-to-the-building broadband with download and upload speeds of 1 gigabit per second (Gbps).</p> <p>The Novusmodus Fund invested €3.3 million in Endeco, smart grid optimisation solutions technology.</p> <p>A new Smart Energy Services business has been established to help large energy users achieve significant energy efficiency enhancements.</p>

See pages 44 to 53 for business unit sustainability details.

ENERGY USAGE IN 2016

Energy Efficiency Regulations S.I. No. 426 of 2014 (Irish legislation, transposing EU legislation to local legislation) requires ESB to disclose its annual energy usage and describe the initiatives being undertaken to improve energy performance. ESB monitors and reports on energy consumption against its baseline (2005 for generation, 2006-2008 average for operations) and is committed to continuing the drive towards improved energy performance.

GENERATION





Electricity generation accounts for over 90% of ESB's use of energy. In 2016, ESB consumed 36,828 GWh of fossil fuel energy in generating electricity across its full fleet. Carbon emissions from generation in 2016 totalled 10.23 million tonnes, at a carbon intensity of 560 gCO₂/kWh, reflecting an overall decrease in emissions of 5% on 2015. Increasing levels of renewable generation in ESB's fleet and the commercial operation of the Carrington Plant reduced the overall carbon intensity of ESB's generation activities.

BUSINESS OPERATIONS

In relation to the remaining energy use, the amount of energy used by ESB in its buildings constitutes the most significant portion, followed by that used in its fleet and in private cars in carrying out Company business. The bulk of the energy used is attributable to space heating. Internal use accounted for 125 GWh primary energy equivalent (PEE) in non-generation activities (baseline 167 GWh). Against the baseline consumption (2006-2008 average), ESB has delivered a 22.2% improvement in its PEE consumption. This is in line with the Government objective for the public sector of a 33% improvement in energy efficiency by 2020.

During 2016, ESB undertook a number of deep retrofits of ageing building infrastructure to upgrade building fabric and overall energy performance of these prioritised premises. In addition, a suite of energy audits was undertaken across a sample of premises and fleet to identify and prioritise opportunities for improving energy efficiency and performance. The output of this energy audit process provides detailed opportunities for energy efficiency upgrades and interventions across ESB building and fleet operations for the coming years.

The proposed redevelopment of the Fitzwilliam Street Head Office complex is planned to commence in 2017. This redevelopment will provide a more sustainable and efficient office space for ESB employees when it is completed.

GENERATION			
ENERGY SOURCE		2016*	2015
Coal (GWh)		12,807	13,106
Natural Gas (GWh)		18,839	7,791
Peat (GWh)		4,629	4,676
Oil (GWh)		553	631
Total		36,828	26,204

BUSINESS OPERATIONS

ENERGY SOURCE	2006 - 2008 AVG.*	2016 GWH	CHANGE (GWH)
Electricity	39	29	(10)
Electricity Primary Energy Equivalent	96	66	(30)
Fossil Fuels			
- Natural Gas	1	2	1
- Heating Oil	-	-	-
- Diesel	70	57	(13)
Total Fossil Fuels	71	59	(12)
Renewable Energy	-	-	-
Total Primary Energy Equivalent	167	125	(42)

*Baseline reflects calculations for compliance with Sustainable Energy Authority of Ireland (SEAI) Public Sector Monitoring and Reporting. 2016 figures for PEE as reported in annual report 2016 on Public Sector Energy Efficiency Performance.

CORPORATE RESPONSIBILITY

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

ENERGY FOR GENERATIONS FUND

ESB is committed to playing a role in addressing some of the key social issues facing the country today. The aim with the Energy for Generations Fund is to maximise the impact of the investment by taking a more strategic approach to affect change.

In 2016, over €2 million was disbursed across a range of community and issues-based initiatives. Nearly €1 million of this was direct funding through a quarterly fund, managed by a cross-Company Committee, to 154 charities working in the areas of suicide prevention, homelessness and education access and support. These projects are rooted in communities across Ireland and aim to improve the quality of life for those living in the community.

The remainder was allocated across a range of initiatives including support for ElectricAid, strategic partnerships, wind farm community funds and support for employee volunteering.

Education Matters

ESB, in common with many other Irish companies, need access to employees with strong science, technology, maths and literacy skills and all of these are grounded in getting young children off to the best educational start possible. The support of programmes such as Time to Read, Time to Count, Fighting Words and TechSpace allows ESB to do this, while also providing employees with a meaningful volunteering opportunity.

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

Employee Volunteering Support

ESB also wants to leverage the skills and knowledge it has to bring about more sustainable

and positive outcomes. ESB encourages volunteerism by its employees and local community support and the Energy for Generation Fund provides support to ESB employees who volunteer in their own communities.

Any employee who volunteers for over 20 hours with a charity can request that ESB donates €250 to that organisation. There has been a good response to this initiative, with donations being made to a wide range of charities including Down Syndrome Ireland, Capuchin Day Centre, Special Olympics Ireland, Irish Red Cross and Scouting Ireland. Over 30,000 volunteered hours have been recorded by employees, up to the end of December 2016.

WIND FARM COMMUNITY FUND

ESB actively supports the communities in the vicinity of its wind farms. In 2016, ESB committed over €1 million to a diverse range of community projects in the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB).

SPONSORSHIP

The Group manages an active sponsorship portfolio in the following areas:

- Promoting young people in sport, through the Electric Ireland GAA All-Ireland minor championship, Team Ireland for the 2016 Rio Olympics and Ireland's under-20s rugby
- Proud supporter and sponsor to the Pieta House Darkness into Light annual event
- Supporting the arts and music through sponsorships of Feis Ceoil, Electric Picnic and the National Gallery
- Supporting the development of skills in science, technology and engineering through partnerships with Science Gallery Dublin, City Spectacular and Engineers Ireland
- Supporting the Young Saint Vincent De Paul National Youth Development Programme, which aims to change negative perceptions of young people and develop pride in the positive impact young people have in Irish society

CHAMBERS IRELAND OUTSTANDING ACHIEVEMENT AWARD

ESB won the Outstanding Achievement in Corporate Social Responsibility (CSR) Award at the 2016 Chambers Ireland CSR Awards. ESB claimed the top honours for having its CSR practices embedded at the Company's core and for our ongoing dedication to community engagement and responsible business practice.

INTERNATIONAL CSR

ElectricAid is the social justice and development charity of ESB (and EirGrid) employees and pensioners. ElectricAid is controlled by its 2,630 contributing members, and receives strong and consistent support from ESB, in the form of 2:3 matching contributions, up to an annual ceiling of €250,000. ElectricAid is the premier occupationally-based charity in the country.

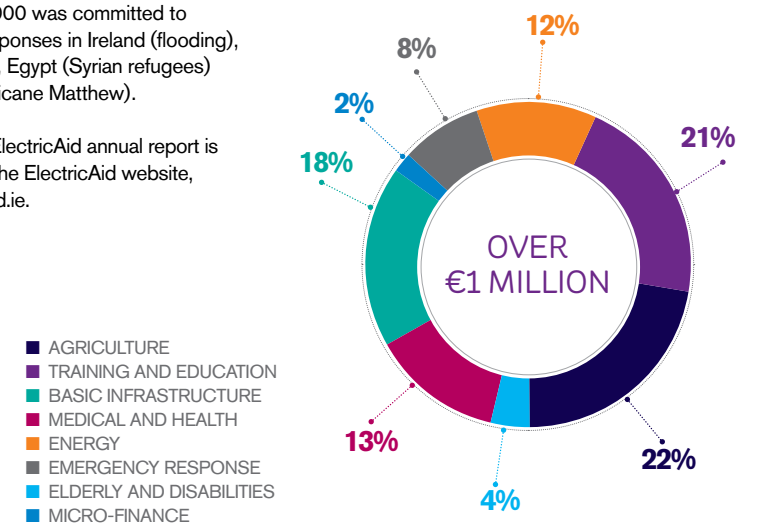
In 2016, ElectricAid supported 135 development and relief projects with funding of over €1 million. Funding was made available in Ireland and in 35

different developing countries. ElectricAid's international impact is shown in the table below.

Almost €100,000 was committed to emergency responses in Ireland (flooding), Ethiopia, Niger, Egypt (Syrian refugees) and Haiti (Hurricane Matthew).

A copy of the ElectricAid annual report is available from the ElectricAid website, www.electricaid.ie.

ELECTRICAID 2016 FUNDING



ENERGY FOR GENERATIONS FUND



■ THE FUND DONATED ALMOST €1 MILLION TO 154 PROJECTS ACROSS IRELAND



■ EDUCATION (37 PROJECTS FUNDED)



■ HOMELESSNESS (42 PROJECTS FUNDED)



■ SUICIDE (75 PROJECTS FUNDED)



LOCATION OF CHARITIES

Investment

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

€897M

Residential Customer Satisfaction

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

94%

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

Apprentice and Graduates recruited 160

USING OUR PROFITS IN A SUSTAINABLE WAY

Taxes

Annual payments across various tax headings

Total Taxes over

€500M

Supporting Communities

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

€10M

over the past decade

Return to shareholder

ESB delivers an annual dividend to its shareholder of 38% of profit after tax

€116M for 2016

Debt Investors

Annual interest and repayments of over

€500M

CORPORATE GOVERNANCE

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Board Members'
Report

"As a dad of young children I know how important it is to help our children stay safe. I was delighted to be a part of 'Stay Safe, Stay Clear' campaign in conjunction with the Road Safety Authority, where we gave out high-vis vests to every junior infant starting school last September. ESB Networks is working hard, not only to make sure children are highly visible on dark mornings and evenings, but also to make sure they understand the dangers of climbing poles near overhead lines."

Dermot Cunningham
ESB Networks



THE BOARD IN 2016

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 and following due consideration of the risks identified through the risk management process. The Board constructively challenges and helps develop proposals on strategy, which are then reviewed and approved by the Board.



Elvena Graham ■ ■ ■
Chairman

experience within the wider Royal Bank of Scotland (RBS) Group, having managed large scale operations in Europe, the Middle East and Africa for the RBS Group.

External appointments: Chairman of the Economic Advisory Group (EAG) in NI. Non-Executive Director of Ulster Bank Ltd, a Board member of the NI Chamber of Commerce and Industry and Chair of the new Belfast Waterfront and Ulster Hall Ltd Board. Fellow of the Institute of Banking.

Appointment to the Board: October 2010 and appointed as Chairman with effect from July 2015.
Tenure: Six years and three months (One year and five months as Chairman).

Career experience: Elvena has over 30 years' experience in banking, most recently at Executive Management level within Ulster Bank, where she was Head of Ulster Bank in Northern Ireland (NI) and Managing Director of SME Banking across the island of Ireland. Elvena has global



Dave Byrne ■ ■ ■
Worker Board Member

representative in Central Partnership.

Appointment to the Board: January 2011 under the Worker Participation (State Enterprises) Act 1977.

Tenure: Six years.

Career experience: Member of a team that is now part of ESB's Business Service Centre organisation and previously worked in Customer Supply (now Electric Ireland).

External appointments: President of ESB Officers Association (ESBOA) until April 2010 and then appointed as the Group of Union's



Andrew Hastings ■ ■ ■
Independent Board Member

External appointments: Director of Elavon Financial Services DAC, the Dublin-based subsidiary of US Bancorp, Pepper Finance Corporation (Ireland) DAC and a Director of Carrick Laurel Consulting Ltd. Partner with AP Partners and consultant to London-based Valuation Consulting LLP. Chairman of the Independent Non-Executive Director Forum at the Federation of International Banks in Ireland within the Banking & Payments Federation Ireland.

Appointment to the Board: July 2015.

Tenure: One year and six months.

Career experience: Business consultant and Independent Non-Executive Director following a 30 year career in banking and financial services. A Chartered Director, Chartered Banker and Certified Bank Director, he held 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.



Pat O'Doherty ■ ■ ■
Chief Executive

Advanced Management Programme at Harvard Business School.

External appointments: Trustee of The Conference Board of the United States, Director of Energy UK and Chair of the Apprenticeship Council of Ireland.

Appointment to the Board: January 2013 as Board member and December 2011 as Chief Executive.
Tenure: Four years as Board member.

Career experience: Holds primary and master's degrees in engineering from University College Dublin. Prior to his current role, Pat headed up ESB's largest businesses as Executive Director ESB International, Managing Director, ESB Networks DAC and Executive Director, ESB Power Generation. Completed the



Seán Kelly ■ ■ ■
Worker Board Member

Directors Group. Member of the Mediators' Institute of Ireland.

Appointment to the Board: January 2011 under the Worker Participation (State Enterprises) Act 1977.

Tenure: Six years.

Career experience: Joined ESB in 1997 as an apprentice network technician.

External appointments: Chairperson of the ESB Defined Benefit Superannuation Committee, Chairperson of the Networks National Safety Committee and Training Officer for the National Worker



Anne Butler ■ ■ ■
Independent Board Member

National Roads Authority (NRA), Ordinance Survey Ireland (OSI), Dublin Institute of Technology (DIT), REPAK and the National Paediatric Hospital Development Board.

Appointment to the Board: November 2012.

Tenure: Four years and two months.

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

External appointments: Served on a number of boards including the



Paul Lynam ■ ■ ■
Independent Board Member

the Smurfit Group and Kappa Packaging.

External appointments: Director of Siemens Limited Ireland between 2008 and 2015 and Director of Whitfield Clinic associated companies.

Appointment to the Board: October 2016.

Tenure: Three months.

Career experience: A total of 25 years' experience in business and is CEO of the Whitfield Clinic in Waterford, an independent private hospital. Prior to this, he spent 5 years as CEO of Siemens Limited Ireland and was also CFO of Siemens Limited Ireland in the period 2008 – 2010. Before his 10 years with Siemens, Paul spent 14 years in Germany in various management roles in both



Tony Merriman ■ ■ ■
Worker Board Member

Appointment to the Board: January 2007 under the Worker Participation (State Enterprises) Act 1977.

Tenure: Ten 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 ESOP Trustee Limited and Chairman of the National Worker Directors Group.



Peter O'Sullivan ■ ■ ■
Workers Board Member

Appointment to the Board: January 2015 under the Worker Participation (State Enterprises) Act 1977.

Tenure: Two years.

Career experience: Joined ESB as a network technician in 1980. Formerly Safety Representative in Kerry / West Cork.

External appointments: Former President of Network Technicians' Association and negotiation member of Group of Unions. Board member of ESOP Trustee Limited.



Alf Smiddy ■ ■ ■
Independent Board Member

member of the Dalata Hotel Group plc, Director of Cork Chamber of Commerce, Chairman of the Cork Local Government Committee and a Director of the Government-backed Social Innovation Fund Ireland. Member of Chartered Accountants Ireland and a Fellow of the Irish Marketing Institute.

Appointment to the Board: October 2016.

Tenure: Three months.

Career experience: Chartered accountant who has worked with PwC. Chairman and Managing Director of Cork headquartered Beamish & Crawford plc for over 12 years and on the Board of its parent company, Scottish & Newcastle (UK) Ltd. Member of the National Executive Council of IBEC and served on the Board of Cork Airport Authority.

External appointments: Board



Noreen O'Kelly ■ ■ ■
Independent Board Member

/ Chair of Audit Committee of Rehab and external member of the Audit Committee of the Institute of Technology, Sligo.

Appointment to the Board: April 2013.

Tenure: Three years and eight months.

Career experience: Chartered accountant trained with KPMG. Held a number of senior positions in Independent News and Media Group including Head of Treasury and Group Secretary. In 2002, she was appointed Company Secretary of C&C Group. Consultant on corporate governance.

External appointments: Director



Noreen Wright ■ ■ ■
Independent Board Member

Tribunals of Northern Ireland and the Northern Ireland Valuation Tribunal. Director of both Springvale Training Limited and Co-operation Ireland Limited.

Appointment to the Board: June 2011.

Tenure: Five years and six months.

Career experience: Called to the Bar of Northern Ireland in 1976. Worked in the electricity industry for 25 years and held a number of senior management posts in both Northern Ireland Electricity plc and Viridian plc, including Company Secretary and Head of Legal Services.

External appointments: Lay Magistrate, member of both the Industrial and Fair Employment

■ AUDIT AND RISK COMMITTEE - ■ SEE PAGE 76
■ HEALTH, SAFETY AND ENVIRONMENT COMMITTEE - ■ SEE PAGE 82
■ REMUNERATION AND MANAGEMENT DEVELOPMENT COMMITTEE - ■ SEE PAGE 82
■ FINANCE AND INVESTMENT COMMITTEE - ■ SEE PAGE 83

¹ Appointment effective from January 2017.

CHAIRMAN'S CORPORATE GOVERNANCE STATEMENT



ELLVENA GRAHAM
Chairman

Good governance provides the foundation for long-term value creation and is a core focus for the ESB Board and for me as Chairman. In this regard, and in line with the UK Corporate Governance Code 2014 (the UK Code), we see our duties as including responsibility for the long-term success of the Group, providing leadership and direction for the business as a whole, and supporting and challenging management to get the best outcomes for ESB and its stakeholders.

Management have the knowledge and expertise for the operational requirements of the business. It is not the role of the Board to duplicate that. However, we do question and monitor in the light of ESB's values and strategic direction. In our view, the best decisions are made through this dynamic interaction between Board and management.

GOVERNANCE

ESB, in pursuit of its governance objectives, complies with the Code of Practice for the Governance of State Bodies 2009 (the State Code) and to the maximum extent possible with the UK Code. In June 2016, the Financial Reporting Council published an updated UK Corporate Governance Code and this applies to accounting periods beginning on or after 17 June 2016. This will apply to ESB for the financial year to 31 December 2017.

ESB has put in place the appropriate measures to comply with the State Code, which sets out the governance framework agreed by Government for the internal management and the internal and external reporting relationships of State Bodies. It continuously reviews and updates its policies and procedures to ensure compliance with the State Code and a report on such compliance is made annually to the Audit and Risk Committee.

The Department of Public Expenditure and Reform issued a revised Code of Practice for the Governance of State Bodies in August 2016. This 2016 version applies to financial reporting periods beginning on or after 1 September 2016, in ESB's case for the financial year to 31 December 2017. The Board and Audit and Risk Committee

considered the new requirements at its meetings in September and December 2016 respectively and are satisfied that ESB will be able to comply appropriately with these requirements.

The Board is also mindful of the new requirements of the Companies Act 2014 (the Act), which applies to ESB subsidiary companies. The re-registration of ESB subsidiary companies, as required by the Act, was completed during 2016, and ESB has implemented actions to ensure that its subsidiaries comply with all other requirements of the Act, including where applicable, requirements for Directors' compliance statements.

ESB also conforms as far as possible and on a voluntary basis to the Irish Corporate Governance Annex. We do this to adhere as closely as possible to listed company governance standards.

ESB has adopted its own Code of Ethics, which sets out our approach to responsible and ethical business behaviour. The underlying principle of the Code of Ethics is that employees' best serve ESB by adhering to the highest standards of integrity, loyalty, fairness and confidentiality and by meeting all legal and regulatory requirements. The Code of Ethics is reviewed annually by the Board and published on the ESB intranet. Group Internal Audit investigate any reported breaches and update the Audit and Risk Committee.

A detailed description of our governance compliance is set out on pages 69 to 75.

BOARD EFFECTIVENESS

The Board continually strives to improve its effectiveness. We do this on an informal, ongoing basis by discussion among Board members and feedback to the Chairman and Company Secretary. We also undertake a formal evaluation annually and a mid-year review. The results of the Board evaluation in respect of 2016 are described on page 72. An independent evaluation is conducted every three years and one such independent facilitated evaluation is currently being undertaken by ICSA Board Evaluation with the results expected later in 2017.

BOARD AND COMMITTEE CHANGES

Paul Lynam and Alf Smiddy joined the Board as Independent Board members in October 2016. Both appointments ensure that the Board continues to have access to key expertise and competence in an organisation that plays an important role in the Irish energy market. I welcome our two new Board members and look forward to working with them.

Under Section 2 (4) of the Electricity (Supply) Act 1927, Noreen Wright was re-appointed as an Independent Board member for a second term with effect from June 2016. Noreen is the Senior Independent Director.

Séamus Mallon's second term of office expired in May 2016. Séamus served as an Independent

Board member for 10 years and both the Board and management benefited from his expertise, commitment to public service, wise judgement and integrity. Committee membership details are set out on pages 66 to 67 of this report.

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 a strong internal control framework. While the Board has overall responsibility for the Group's approach to risk, the responsibility for supporting the Board's review of the effectiveness of internal control and risk management has been delegated to the Audit and Risk Committee who played a key role in 2016 in ensuring that appropriate governance and challenge around risk and assurance was embedded across the Group. The approach to risk is set out in the Risk Report on pages 18 to 23.

BOARD DIVERSITY

The Board, both for itself and the Group as a whole, is fully committed to diversity as a key value, as this is seen as important to achieving ESB's business objectives. The Board remains committed to achieving the optimal balance of skills, experience and diversity among its members. Board member details are set out on pages 66 to 67.

EXTERNAL AUDITOR

ESB carried out a tender process with the approval and oversight of the Audit and Risk Committee to select ESB's next external auditor, resulting in the recommendation of PwC as external auditor of the Group's financial statements for up to three years (i.e. 2017, 2018 and 2019 financial years) with an option to extend for a further two years. We look forward to working with PwC in the future. Further details on the tender process are set out on page 81.

CONCLUSION

Good governance is good business and is built on competency, transparency and accountability. In pursuit of our goal of strong and sustainable growth, the Board and management remain committed to achieving that transparency and accountability in all we do. In my role as Chairman, I am responsible for making sure that the Board operates effectively by facilitating full participation by each Board member and ensuring effective communication with the Group's owners and stakeholders. 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 across the Group.

Ellvena Graham

Ellvena Graham,
Chairman
22 February 2017

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 (the State Code)¹ and to the maximum extent possible with the UK Corporate Governance Code 2014 (the UK Code). A copy of the State Code can be obtained from the Department of Public Expenditure and Reform website www.per.gov.ie and a copy of the UK Code can be obtained from the Financial Reporting Council's website www.frc.org.uk.

The UK Code sets out five key principles of governance: Leadership, Effectiveness, Accountability, Remuneration and Relations with Shareholders.

1 LEADERSHIP

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 strategy, performance, resources and governance. During 2016, the Board comprised of the Board members detailed on pages 66 to 67 of whom the Chairman, the Chief Executive and the Independent Board members were appointed by 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) Acts.

BOARD MEMBERSHIP

The ESB Board in 2016 brought diverse experience, independence and challenge to support effective decision-making. The range of Board members' experience in engineering / technical, finance, legal, marketing and in ESB's operations is set out in their biographies on pages 66 to 67. The Board is confident that all its members have the knowledge, ability and experience to perform the functions required of a Board member.

The Board's primary role is to exercise objective and informed judgement in constructively challenging, helping to develop and approve the ESB Group Strategy, to ensure there is a strong management team in place to execute the strategy and monitor business performance and to maintain a framework of prudent and effective controls

to mitigate risk. Two critical factors determine how the Board is equipped to fulfil those duties and obligations successfully:

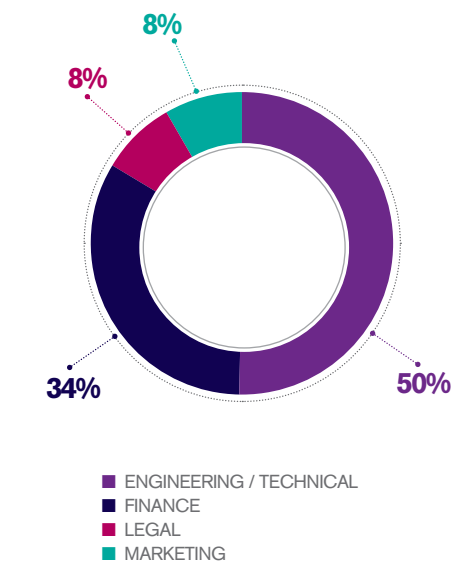
- A diverse and deep range of skills and experiences around the boardroom table
- Processes to ensure that all of the Board members develop a good understanding of the Group's operations and external

environment and are therefore well placed to make informed decisions.

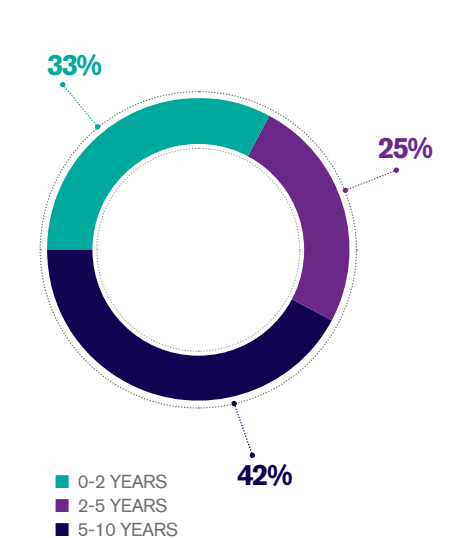
The State Code provides that the Chairman may engage with the Government on succession and this provides an opportunity for ensuring an appropriate mix of skills and experience on the Board.

MEMBERSHIP DIVERSITY

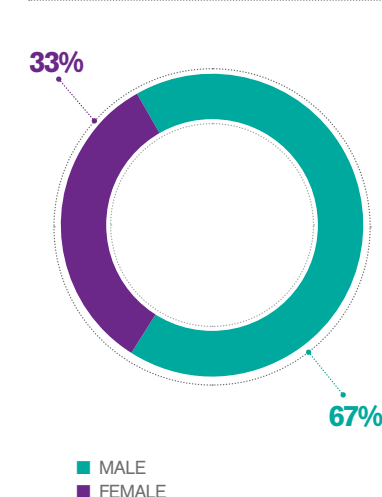
BOARD DIVERSITY
BY SECTOR



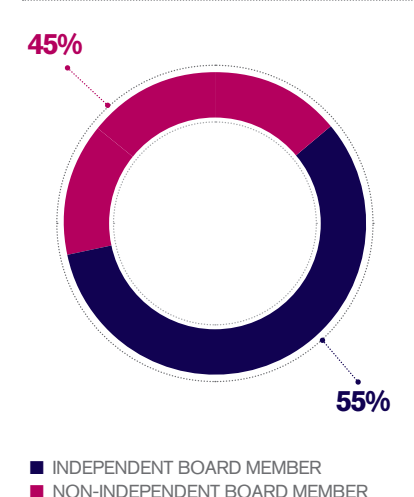
BOARD DIVERSITY
BY TENURE



BOARD DIVERSITY
BY GENDER



BOARD DIVERSITY
BY INDEPENDENCE



¹ The Department of Public Expenditure and Reform issued a revised Code of Practice for the Governance of State Bodies in August 2016. This 2016 version applies to financial reporting periods beginning on or after 1 September 2016, in ESB's case for the financial year to 31 December 2017.

BOARD MEETINGS

The Board meets monthly (with the exception of August) and meets on other occasions as necessary. 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. The matters reserved to the Board are described on page 71.

The Board has delegated authority to management for decisions in the normal course of business subject to specified limits and thresholds. Oversight of decisions, which are delegated by the Board, is retained through a robust reporting framework, central to which are effective relations with the Board Committees, Chief Executive, Executive Director of Group Finance and Commercial and the Executive Team.

There is ongoing financial and operational reporting to the Board and papers are sent to each member on a timely basis before the Board meetings. The Board papers include the minutes of Board Committee meetings.

The intention at the Board meetings is to achieve the right balance of people, strategy, operations, finance and governance and risk management

matters. This is regularly monitored to ensure adequate time is devoted to each matter to maintain the required balance. 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.

In addition to safety, the Board's focus for 2017 will be on ESB's leadership on climate change and how the Group, as Ireland's leading energy Company, can play its part and help others to manage the necessary change to a low-carbon future. The Board will also monitor the emerging Brexit process in order to continue to manage and monitor the challenges and opportunities which investing in Northern Ireland (NI) and Great Britain (GB) provide.

BOARD COMMITTEES

Four Committees of the Board assist in the discharge of its responsibilities and the Board delegates specific responsibilities to those Board Committees as set out in their Terms of Reference. The Committees assist the Board by giving more detailed consideration to business, operational, financial and governance issues and they report to the Board with any necessary recommendations. The Committees and their membership are set out on pages 76, 82 and 83 of this report.

ATTENDANCE AT MEETINGS IN 2016

There were 11 General Board meetings during 2016. The attendance by each Board member during the year is set out below.

Board Members 2016	Meetings Attended
Ellvena Graham	11
Anne Butler*	11
Dave Byrne^	10
Andrew Hastings*	11
Seán Kelly^	11
Paul Lynam* 2	3
Séamus Mallon*1	2
Tony Merriman^	8
Noreen O'Kelly*	11
Peter O'Sullivan^	11
Alf Smiddy* 2	3
Noreen Wright*	11
Pat O'Doherty	11

* Independent Board member

^ Worker Board member

1Séamus Mallon - retired May 2016

2Paul Lynam and Alf Smiddy - joined October 2016

In addition to the Board members, a number of senior managers attend relevant sections of Board meetings, by invitation.

EXAMPLES OF MATTERS CONSIDERED AND / OR APPROVED BY THE BOARD IN 2016

PEOPLE	
■ Implementation of the new employment model	
■ Group Health, Safety and Wellbeing Report	
STRATEGY	OPERATIONS
■ Strategy review and update	■ Chief Executive operations report
■ Energy policy and market updates	■ Health and safety reports
■ Competitor activity and utility sector trends	■ Energy trading updates
■ Integrated Single Electricity Market (I-SEM) update	■ Plant overhauls programme
■ Brexit implications	■ Capital investment evaluations
	■ Performance of Novusmodus fund
	■ Joint venture reports
	■ Regulated business updates
FINANCE	GOVERNANCE AND RISK MANAGEMENT
■ Annual and half-yearly published results	■ Group Risk Appetite Statement and Group Risk Plan
■ Quarterly financial performance and forecasts	■ Effectiveness of risk management and internal control
■ Monthly Key Performance Indicators	■ Internal audit plan for the year
■ Annual budget and five-year business plan	■ Annual Board evaluation and mid-year review
■ Interim and final dividends	■ Committee Terms of Reference
■ Capital markets funding – €600 million bond issue in June 2016	■ Annual review of ESB Board Code of Ethics
■ Credit rating agency updates	■ Briefing on Freedom of Information
■ Cost of capital and hurdle rates for new investments	■ Independent assessment of the effectiveness of the internal control function
	■ Audit tender process
	■ Code of Practice for the Governance of State Bodies (2016) reviewed
	■ Annual review of the effectiveness of internal control and risk management

THE WAY WE ARE STRUCTURED

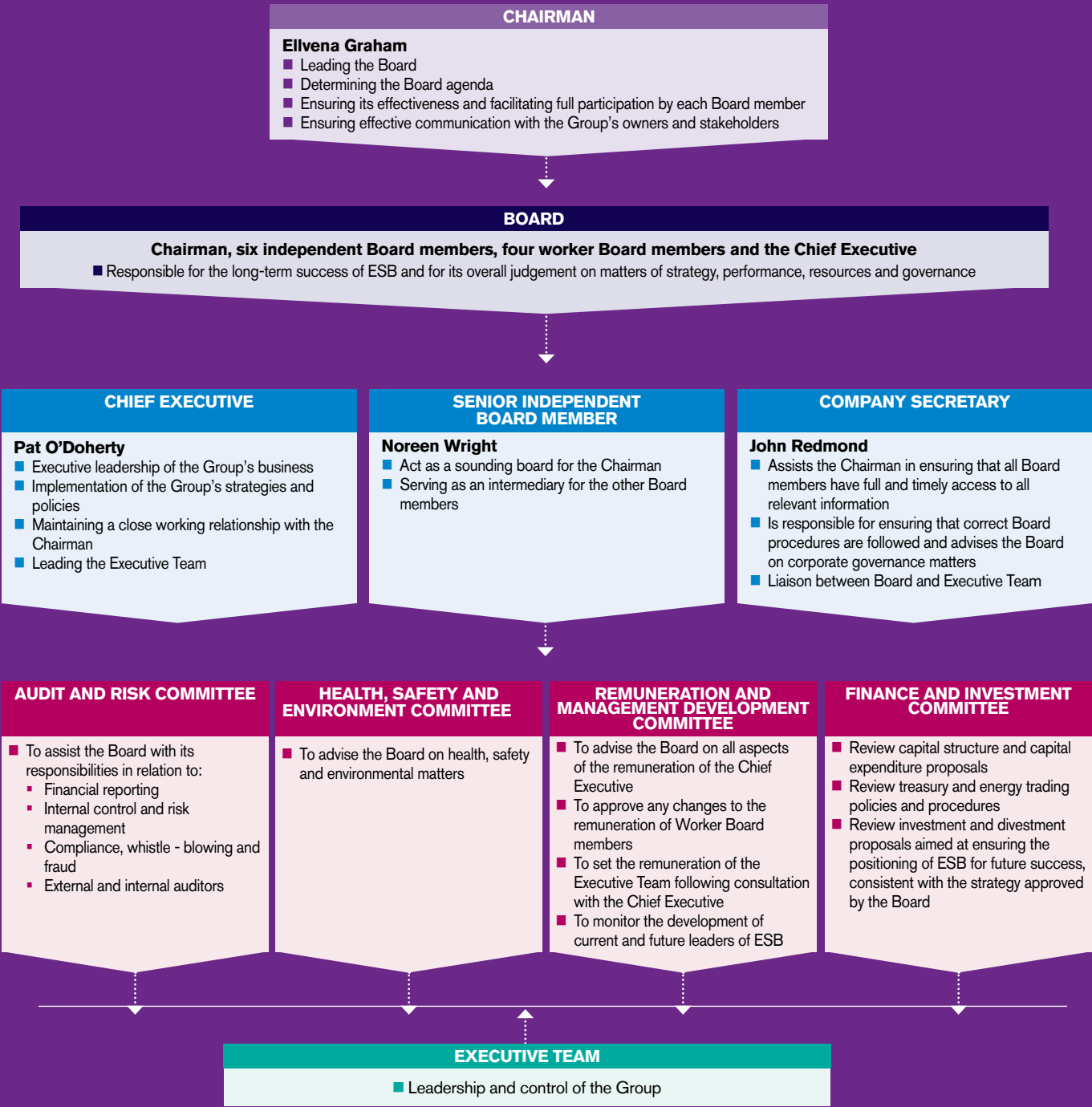
The organisation is structured to allow for effective and efficient decision making with clear accountability.

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 and following due consideration of the risks identified through the risk management process. The Board constructively challenges and helps develop proposals on strategy, which are then reviewed and approved by the Board.

The Board has reserved the following key decisions for its own consideration:

- Approval of ESB Group Strategy, annual budgets and annual and interim financial statements
- Review of operational and financial performance
- Approval of major capital expenditure
- Overall review of Group health and safety performance
- Appointment of the Chief Executive
- Appointments to the Executive Team on the recommendation of the Chief Executive
- Appointment of the Company Secretary
- Major acquisitions, disposals or retirements
- Approval of the Group principal risks



See pages 66 to 67 for biographical details of the Chairman, Chief Executive and Senior Independent Director.

See page 33 for biographical details of the Company Secretary.

See pages 32 to 33 for biographical details of the Executive Team.

2 EFFECTIVENESS

BOARD EFFECTIVENESS

The Board conducts an annual evaluation of its own performance and that of its Committees. This evaluation is undertaken in order to comply with the State Code and, so far as possible, with the UK Code. The evaluation relates to the Board's collective performance and not to the individual performance of Board members. The purpose of the evaluation is to review the Board's own operation and to identify ways to improve its effectiveness. It also helps to identify specific skills required or desirable in Board members and the Chairman can make suggestions to Government for consideration when making appointments. 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 annual evaluation consists of a questionnaire and based on Board members' replies, a report is made to the Board on the outcome with proposed actions to address issues raised. Implementation is reviewed at mid-year. An independent evaluation based on one-to-one interviews between Board members and the external facilitator is conducted every three years and one such independent facilitated evaluation took place in January 2017.

In addition, the Chairman meets with Board members including the Senior Independent Board member for an open exchange among Board members concerning the efficiency and effectiveness of the Board.

An internal Board evaluation was undertaken in 2016 and a mid-year review was undertaken during the year. The Board concluded that overall it operated effectively throughout the period under

review. A number of recommendations were identified as outlined in the table below.

BOARD APPOINTMENTS

As Board appointments are a matter for Government or for election by employees, ESB does not undertake an evaluation of individual Board members. However, the Chairman does engage with Government in advance of the Board appointment process about the specific skills that are required on the Board. Board appointments conform to the Guidelines on Appointments to State Boards as published by the Department of Public Expenditure and Reform in November 2014.

INFORMATION AND BRIEFINGS

In order to maintain and enhance the effectiveness of the Board, it is essential that Board members are kept up to date with key business developments. The details of the Board's activities in 2016 are outlined on page 70. The Board receives regular updates on the regulatory environment, the market and operations including a monthly Key Performance Indicator report.

Site visits are arranged for individuals and groups of Board members to allow a greater understanding of ESB business. Visits in 2016 included the Raheenleagh Wind Farm in County Wicklow, Tilbury Green Power, a waste wood to energy plant at Tilbury Port, UK, the ESB Trading floor, Novusmodus London Office and West Offaly Power Station.

Board meetings were also scheduled outside the head office location in 2016 including meetings in NIE Networks in Belfast, Electric Ireland in Santry, Dublin and ESB Networks in Wilton, County Cork.

INDEPENDENCE

The Board has determined that those Board members (details on pages 66 to 67) were independent during 2016. This determination

took account of the relevant provisions of the UK Code regarding Board members' independence in character and judgement and the absence of relationships or circumstances which could compromise Board members' independence. In light of these factors, the Board is satisfied of the independence of the Board members identified above.

CONFLICTS OF INTEREST

Board members make annual disclosures of any such potential or actual conflicts of interest. The Board continues to monitor and review actual and potential conflicts of interest on an ongoing basis and Board members are responsible for notifying the Company Secretary if they become aware of an actual or potential conflict situation or a change in circumstances relating to an existing authorisation.

Biographical details for all the Board members, including details of their external appointments are set out on pages 66 to 67.

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 the requirements of the role. Key elements are meeting the Executives, visiting sites and receiving a briefing on the ESB Group Strategy and on individual businesses.

Following appointment to the Board in 2016, Paul Lynam and Alf Smiddy are participating in a comprehensive induction programme, which is facilitated by both the Chairman and the Company Secretary. During the induction programme, each Board member meets the Chairman and the Executive Team separately. Both members visited the business locations of Generation and Wholesale Markets, ESB Networks and Electric Ireland during 2016.

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.

INDEPENDENT PROFESSIONAL ADVICE

The Board members, in the furtherance of their duties, may take independent professional advice, at the expense of ESB. All Board members have access to the advice and services of the Company Secretary. Insurance cover is in place to protect Board members and officers against liability arising from legal actions taken against them in the course of their duties.

3 ACCOUNTABILITY

COMPLIANCE WITH CORPORATE GOVERNANCE CODES

ESB complies with the State Code, which sets out the principles of corporate governance, which the 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 conforms as far as possible and on a voluntary basis to the UK Code. ESB also complies, as far as possible, with the Irish Corporate Governance Annex (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 of the UK Code, if the Group has complied with all relevant provisions and the related Irish Annex and to provide an explanation in the event of non-compliance.

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. As stated above, ESB supports the principles and provisions of the UK Code and the Irish Annex and voluntarily complies with them subject to the following exceptions:

- Appointments to the Board are a matter for the Government and accordingly ESB does not have a nomination Committee
- Board members are appointed for terms of five years or four years in the case of Worker Board members and therefore are not subject to re-election to the Board at lesser intervals
- ESB's policies and disclosures in relation

to remuneration of the Chief Executive are in accordance with applicable Government guidelines. The details of Board members' remuneration on page 75 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), but do include amounts paid to them by way of Board fees.

- 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. This matter is kept under review.
- The Board Chairman is also Chairman of the Remuneration and Management Development Committee, given the importance of compliance by ESB with the Government policy in this area and the role of the Chairman as the primary interface with the Government.

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 page 89.

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 against the risk of material misstatement or loss. In order to discharge that responsibility 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.

COSO FRAMEWORK



ESB INTERNAL CONTROL FRAMEWORK

- Control Environment**
1. Demonstrates commitment to control and ethical values
 2. Exercises oversight responsibility
 3. Establishes structure, authority and responsibility
 4. Demonstrates commitment to competence
 5. Enforces accountability

- Risk Assessment**
6. Specifies suitable objectives
 7. Identifies and analyses risk
 8. Assesses fraud risk
 9. Identifies and analyses significant change

- Control Activities**
10. Selects and develops control activities
 11. Selects and develops general controls over activities
 12. Deploys through policies and procedures

- Information and Communication**
13. Uses relevant information
 14. Communicates internally
 15. Communicates externally

- Monitoring Activities**
16. Conducts ongoing and / or separate evaluations
 17. Evaluates and communicates deficiencies

RECOMMENDATIONS FROM 2016 INTERNAL BOARD EVALUATION

2016 RECOMMENDATIONS	ACTIONS TAKEN IN 2016
Opportunities for Independent Board members to meet Executives on business risk issues.	This is facilitated with regular meetings and will be kept under review.
More time for strategic, stakeholder issues and shareholder value.	Monitored the agenda setting process to ensure there is continued linkage to strategy. In 2016, two dedicated Board strategy meetings took place. Regular reporting by Chief Executive.
Full Board to be invited to Audit and Risk Committee Risk session.	The Board attended the Audit and Risk Committee session in April 2016.
Board agendas to give due space to risk issues that could impact the business.	Risk issues were reported monthly by the Chief Executive and formal quarterly risk reports were considered by the Board.
Create more opportunities for Board members to spend informal time together.	Informal engagements were scheduled during the year.

ESB has in place a strong internal control framework, which includes the following:

- A code of ethics that requires all Board members and employees to maintain the highest ethical standards in conducting business
- 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 which includes risk analysis, financial control review and formal annual governance compliance statements by the management of business lines
- A comprehensive set of policies and procedures relating to operational and financial controls
- Large capital projects require the approval of the Board and are closely monitored on an ongoing basis by the Finance and Investment Committee – they are also subject to post-completion audits
- Comprehensive budgeting systems with an annual budget approved by the Board
- A comprehensive system of financial reporting
- Cumulative actual results and key performance indicators are reported against budget and considered by the Board on a monthly basis
- A helpline service to provide employees with a confidential and if required, anonymous means to report any fraud or ethical concerns

These controls are reviewed systematically by Group Internal Audit. In these reviews, emphasis is focused 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 strengthening them are put in place and action plans regularly monitored until complete.

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 makes it all the more important to continuously reassess risks and have clear strategies to manage them. The Board has overall responsibility for the Group's approach to risk.

Specifically the Board is responsible for:

- Ensuring that an adequate process designed to identify the principal risks and uncertainties is in place
- Overseeing that an appropriate risk culture is embedded throughout the Group
- Oversight of the risk management and crisis management processes
- Assessment of the likely effectiveness of management's mitigation measures and controls

The Board has carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity. A cyclical review process for identifying, assessing and managing its significant risks has been in place for the year under review and up to the date of approval of the annual report. The principal risks and uncertainties facing the Group and the mitigating strategies are set out on pages 20 to 23.

The Board is aware that it must lead by example in shaping and supporting the 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 emerging risks and uncertainties.

Risk appetite may also vary over time and the Board has explicitly considered the level of this appetite and any deviation from its stated appetite for risk that the Group is prepared to accept in respect of specific risks. The propensity to take risk is always balanced by a focus on exercising control.

ACTIVITIES UNDERTAKEN BY THE BOARD AND THE AUDIT AND RISK COMMITTEE DURING 2016 IN RESPECT OF ITS RISK RESPONSIBILITIES INCLUDED:

ACTIVITY	DETAIL
Risk Appetite Statement and Group Risk Plan	The Audit and Risk Committee recommended the 2016 Group Risk Plan and Risk Appetite Statement to the Board for approval.
Risk Oversight	The Audit and Risk Committee considered the allocation of risk oversight to Board Committees and the work programme on risk for 2016.
Cyber Risk	Update received on cyber risk and the operational defences within ESB and the areas most at risk.
Business Continuity Planning (BCP)	BCP report submitted to the Audit and Risk Committee focused on key processes.
High Impact Low Probability (HILP) Two-Year Review	The Audit and Risk Committee HILP two-year review was recommended to the Board for approval. Some key changes in 2016 included the removal of two HILPS (Cyber and Whistle-blowing). Cyber is now being addressed under principal risks.
Risk Management Policy and Governance Framework	A comprehensive policy to inform all management and employees on risk management was recommended to the Board for approval.
Crisis Management Policy / Corporate Crisis Management Guideline	Revised guidelines were considered by the Audit and Risk Committee.
Year End and Mid-Year Risk Review	The Audit and Risk Committee considered an information paper on the principal risks, review of increasing risks and oversight of emerging risks.
Reputation Management	The Board considered a report on managing reputation in the Group and the risks associated with this.
Emerging Risk	The Audit and Risk Committee considered the risks and opportunities associated with disruptive technologies and new business models.

THE 2016 REVIEW OF THE EFFECTIVENESS OF INTERNAL CONTROL AND RISK MANAGEMENT

The Board retains the overall responsibility for internal control and risk management. During 2016, the Board has directly and through the delegated authority to the Audit and Risk Committee, reviewed the effectiveness of the Group's system of internal control covering financial, operational and compliance controls and risk management systems for 2016 and will ensure a similar review is performed in 2017.

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 half-yearly risk review process and regular risk management updates
- Independent advice on the adequacy of the current risk management process operating in ESB
- 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 their findings and reports
- Group Internal Audit also report regularly on the status of implementation of recommendations raised previously from their own reports and reports from the external auditor
- Independent assessment of the effectiveness of the internal audit function
- A review of reports of the external auditor, KPMG, which contain details of work carried out on the key audit risks

On the basis of this review, the Board confirms the following for 2016:

- There is an ongoing process for identifying, evaluating and managing the principal risks of the Group
- Systems of internal control have been in place for the year under review and up to the date of approval of the annual report
- The systems comply with the FRC's Guidance on Risk Management, Internal Control and Related Financial and Business Reporting
- No significant failings or weaknesses were identified in the review and where areas of improvement were identified, processes are in place to ensure necessary action is taken and progress is monitored

Through its ongoing involvement and overview of internal control and risk management activities, the Board is satisfied that internal control and risk management processes remain effective.

4 REMUNERATION

CHIEF EXECUTIVE'S REMUNERATION

The Chief Executive's remuneration is set within a range determined by the Minister for Public Expenditure and Reform and the Minister for Communications, Climate Action and Environment. Pat O'Doherty was appointed Chief Executive, effective 1 December 2011 and was appointed a Board member in January 2013. His remuneration consists of an annual salary of €295,000, a company car and employer pension contribution. He is a member of the ESB Pension Scheme. In line with Government policy that the Chief Executive of state companies should not receive performance related payments, he did not receive any performance related payments in 2016.

WORKER BOARD MEMBERS' REMUNERATION

Worker Board members appointed under the Worker Participation (State Enterprises) Act 1977 are remunerated as employees of ESB. They are members of the ESB Pension Scheme.

INDEPENDENT BOARD MEMBERS' REMUNERATION

The remuneration of the Independent Board members (including the Chairman) is determined by the Minister for Public Expenditure and Reform and the Minister for Communications, Climate Action and Environment and they do not receive pensions or any other remuneration. The terms and conditions are set out in their letter of appointment and this is available on request from the Company Secretary.

BOARD MEMBERS' EXPENSES

In compliance with the State Code, disclosure is required of the expenses paid to Board members. During 2016, €86,884 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 in respect of his duties as an Executive.

BOARD MEMBERS' REMUNERATION

CHAIRMAN	2016 €	2015 €
Ellvena Graham	31,500	23,075
Lochlann Quinn	-	3,952

CHIEF EXECUTIVE

	2016 €	2015 €
Salary	295,000	295,000
Taxable benefits	15,570	15,570
Pension contributions	48,380	48,380
	358,950	358,950

INDEPENDENT / WORKER BOARD MEMBERS

	2016 €	2015 €
Anne Butler	15,750	15,750
Dave Byrne	15,750	15,750
Andrew Hastings	15,750	7,372
Seán Kelly	15,750	15,750
Paul Lynam	3,810	-
Séamus Mallon	5,335	15,750
Tony Merriman	15,750	15,750
Noreen O'Kelly ¹	-	-
Peter O'Sullivan	15,750	15,750
Alf Smiddy	3,810	-
Noreen Wright	15,750	15,750
	123,205	117,622

¹Ms O'Kelly waived her Board fees in 2016 and 2015

5 RELATIONS WITH SHAREHOLDERS

DIALOGUE WITH SHAREHOLDERS

ESB is owned 95% by the Irish Government and 5% by the Trustee 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. It also provides quarterly updates on its financial performance. ESB also regularly engages and consults with the Trustee of the ESOP.

ANNUAL GENERAL MEETING (AGM)

ESB holds an AGM each year and no later than 15 months after the last AGM. The requisite notice is given to all shareholders. Board members including the Chairman of the Audit and Risk Committee are invited to attend. The Chairman gives an overview of the year and invites shareholders to make any comments they may have. The external auditor attends the AGM and voting is by a show of hands or by poll.

AUDIT AND RISK COMMITTEE REPORT



NOREEN O'KELLY
Chairman
Audit and 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 2016. The purpose of the report is to provide an insight into the workings of the Audit and Risk Committee over the last twelve months. I confirm that the Audit and Risk Committee satisfied its responsibilities as set out in the Terms of Reference and under the UK Corporate Governance Code 2014 (the UK Code).

Under the UK Code, the Board has a responsibility to confirm that the annual report and financial statements taken as a whole, is

fair, balanced and understandable and provides all the necessary information for shareholders / stakeholders to assess the Group's performance, business model and strategy. The Audit and Risk Committee has reviewed the annual report and financial statements and is satisfied that it meets these criteria and can recommend 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 78 to 79.

The Audit and Risk Committee will keep its activities under review to ensure that future developments relating to the work of the Audit and Risk Committee are fully considered. The responsibilities of the Audit and Risk Committee are summarised on page 71 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 66 and 67. The members bring a broad range of experience and expertise from a wide range of industries, which is vital to supporting effective governance.

The Audit and Risk Committee has been keeping developments at EU level in regard to audit tenure under close review and taking account of these developments and market practice in

the Republic of Ireland (ROI) and the United Kingdom (UK), a decision was taken to seek Ministerial approval to appoint a new external auditor for the audit of 2017 onwards. ESB carried out a tender process with the approval and oversight of the Audit and Risk Committee to select ESB's next external auditor, resulting in the recommendation to appoint PwC as external auditor for up to three years (i.e. 2017, 2018 and 2019 financial years) with an option to extend for a further two years. Further details on the tender process are outlined on page 81.

The audit of the 2016 annual report and financial statements will be the last one conducted by KPMG and I would like to express my sincere appreciation to the partners and employees of KPMG who have worked on ESB for their exemplary service for many years.

The key areas of focus in 2017 by the Audit and Risk Committee will include the following:

- Oversight of the external audit transition to PwC
- Oversight of the implementation of the recommendations arising from the external evaluation of the internal audit function
- Continued focus on cyber and emerging risks
- Continued focus on improving the quality of the communications from management to the Committee and from the Committee to the Board

Committee Meetings

The Audit and Risk Committee held seven meetings during 2016. The members of the Committee and the number of meetings attended are set out below:

Members		Tenure	Meetings Attended
Noreen O'Kelly, Chairman	Independent Board Member	3 years and six months	7
Andrew Hastings	Independent Board Member	1 year and three months	7
Noreen Wright	Independent Board Member	1 year and three months	7

KEY OBJECTIVE

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, Whistle-blowing and Fraud
- Internal Audit
- External Audit

ACTIVITIES UNDERTAKEN BY THE COMMITTEE DURING 2016 IN RESPECT OF THE DISCHARGE OF ITS DUTIES

DUTY	ACTIVITY
Financial Reporting Review the annual 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	<ul style="list-style-type: none">■ Reviewed the clarity and completeness of the disclosures in the annual report and financial statements and the material information presented within them■ Reviewed whether the Group had applied appropriate accounting standards and made appropriate estimates and judgements, taking into account the views of the external auditor■ Reviewed the interim results which consist of financial statements and explanatory notes■ Reviewed and approved the ESB regulatory financial statements■ Considered and challenged the methods used to account for significant or unusual transactions and how these were presented and disclosed in the financial statements
Internal Control and Risk Management Review the effectiveness of internal control and risk management	<ul style="list-style-type: none">■ Reviewed and monitored the effectiveness of the Group's system of internal control■ Reviewed the arrangements for business continuity planning■ Reviewed ESB's revised Risk Policy, 2016 Group Risk Plan and regular Risk Reports and recommended them to the Board for approval■ Monitored the implementation of the recommendations of the external review of Group Risk Management
Compliance, Whistle-blowing and Fraud Review the adequacy and security of the arrangements for employees and contractors to raise concerns, in confidence about possible wrong-doing in financial reporting and other matters	<ul style="list-style-type: none">■ Reviewed the controls and procedures in place to provide assurance of compliance with statutory obligations■ Reviewed the adequacy of the processes adopted by ESB to achieve compliance with the Code of Practice for the Governance of State Bodies (the State Code)■ Reviewed the procedures and policies for preventing and detecting fraud and were informed of any instances of fraud■ Reviewed the adequacy and security of the arrangements for raising concerns confidentially about possible wrongdoing in financial reporting or other matters■ Considered ESB Code of Ethics
Internal Audit Monitor and assess the role and effectiveness of the internal audit function	<ul style="list-style-type: none">■ Reviewed the internal audit plan 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 Group Internal Audit without management being present■ Considered the findings from the external review of the internal audit function
External Audit Monitor and review the objectivity, independence and quality of the external auditor and review the findings of the audit with the external auditor	<ul style="list-style-type: none">■ Reviewed and challenged the proposed external audit plan to ensure that KPMG had identified all key risks and developed robust audit procedures■ Reviewed the report from KPMG on its audit of the financial statements and their responses to accounting, financial control and other audit issues as they arose■ Enforced the policy on the engagement of the external auditor to supply non-audit services■ Met with the external auditor without management being present, giving KPMG the opportunity to raise any matters in confidence■ Evaluation of tender responses for appointment of external auditor■ Recommended to the Board that PwC be appointed as ESB's external auditor

FINANCIAL REPORTING

The Audit and Risk Committee receives and considers the interim and year end financial statements from management as well as directing the work of and receiving reports from the internal audit team and discussing the audit strategy and focus of the external auditor.

Taking into account information from these activities, the Audit and Risk Committee determined the key risks of misstatement of the Group's financial statements related to the following:

- Carrying value of assets
- Pension obligations
- Derivatives and hedging arrangements
- Legal contingent liabilities and disclosures

These issues were discussed with management during the year, with the auditor at the time the Audit and Risk Committee reviewed and agreed the auditor's Group audit plan, when the auditor reviewed the half-year interim financial statements in September 2016 and at the conclusion of the audit of the financial statements.

SIGNIFICANT ISSUES CONSIDERED	HOW ISSUES WERE ADDRESSED BY THE AUDIT AND RISK COMMITTEE
<p>CARRYING VALUE OF ASSETS</p> <p>Republic of Ireland (ROI) and United Kingdom (UK) Generation Portfolio Impairment reviews were performed on the ROI and UK generation portfolios to ensure the carrying values are supported by forecast future discounted cash flows.</p> <p>Networks Transmission and Distribution Assets As at 31 December 2016, there were no indicators of impairment of the carrying value of the regulated asset base of ESB Networks (€7.5 billion) and Northern Ireland Electricity Networks Limited (NIE Networks) (€1.6 billion), which determines the future regulated income to be earned.</p> <p>NIE Networks Goodwill Goodwill recognised in the NIE Networks business as at 31 December 2016 amounted to €177 million. An annual impairment test of goodwill was carried out in accordance with IAS 36 and no reduction in the value of goodwill was required. The growth rate and appropriate discount rate used to carry out this test are significant judgements and these are explained more fully in note 12 to the financial statements.</p>	<p>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.</p> <p>To assist with their decision on the level of impairment charge they carried out the following:</p> <ul style="list-style-type: none">■ Considered detailed papers including descriptions of the methodologies and assumptions applied in deriving the recoverable values including the discount rates used■ Constructively challenged the assumptions and projections presented in the papers■ Considered the detailed reporting from, and findings by, the external auditor <p>Following the review above the Audit and Risk Committee is satisfied with the impairment review approach, key assumptions and no material impairments are required.</p>
<p>PENSION OBLIGATIONS ESB DEFINED BENEFIT PENSION SCHEME (THE SCHEME)</p> <p>In accordance with IAS 19 Employee Benefits, ESB continues to reflect its existing committed obligations on the balance sheet as set out in note 21 to the financial statements. This treatment is based on the following key factors, none of which changed for the year ended 31 December 2016.</p> <ul style="list-style-type: none">■ 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). The Company does not intend that any further contributions, other than the normal ongoing contributions and the balance of the Company's €591 million additional contribution (committed to under the 2010 Pensions Agreement and indexed at 6.25%), will be made.■ Should a deficit arise in the future, the Company 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 Communications, Climate Action and Environment.	<p>The accounting for the obligations to be reflected in the financial statements requires the exercise of judgement. The Board remains 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.</p>

SIGNIFICANT ISSUES CONSIDERED	HOW ISSUES WERE ADDRESSED BY THE AUDIT AND RISK COMMITTEE
<p>DERIVATIVES AND HEDGING ARRANGEMENTS</p> <p>The Audit and Risk Committee recognises the inherent complexities around the accounting for derivatives and hedging arrangements and that a significant level of judgement is required in arriving at the appropriate accounting treatment. The Group uses derivative financial instruments and non-derivative instruments to hedge its exposure to foreign exchange, interest rate and commodity price risk arising from operational, financing and investing activities. The principal derivatives used include interest rate swaps, currency swaps, foreign currency contracts and indexed swap contracts relating to the purchase of fuel and sale of electricity. Derivative contracts which are not designated as own-use contracts are primarily accounted for as cash flow hedges, where they meet cash flow hedge accounting criteria under IAS 39 which impacts principally on equity rather than on the reported earnings of the Group.</p> <p>The above includes the Northern Ireland Retail Price Index (RPI) linked interest rate swaps. As part of the acquisition of NIE Networks in 2010, ESB acquired the RPI swaps. The purpose of these swaps is to manage ESB's risk and reduce exposure to movements in inflation and interest rates. The RPI swaps do not qualify for hedge accounting (as they did not meet the criteria to qualify for hedge accounting under IAS 39 when acquired by ESB) and therefore all fair value movements in the swaps are recorded in the income statement.</p>	<p>To assist with their decision on the reasonableness of the accounting treatment they carried out the following work:</p> <ul style="list-style-type: none">■ Relied on the third party verification process in relation to the valuation of certain derivatives■ Considered the results of the work of the external auditor in relation to derivatives■ Discussed valuation models with management■ Considered hedging policy, risks, being hedged and accounting for such hedges <p>The Audit and Risk Committee recognises the inherent complexities around the accounting for the RPI Swaps.</p> <p>To assist with their decision on the reasonableness of the accounting treatment the Audit and Risk Committee carried out the following work:</p> <ul style="list-style-type: none">■ Reviewed and discussed with management a paper outlining the key details of the RPI Swaps■ Considered the results of the work of the external auditor in relation to the RPI Swaps <p>Based on this work, the Audit and Risk Committee is satisfied that the accounting treatment for the derivatives and hedging arrangements is appropriate.</p>
<p>LEGAL CONTINGENT LIABILITIES AND DISCLOSURES</p> <p>Following flooding in Cork in November 2009, Aviva as UCC's insurer pursued a legal action against ESB in the High Court seeking recovery of €19 million for property damage. On 5 October 2015, the High Court delivered its judgement in the case and found ESB 60% liable for the damage caused and UCC 40% contributory negligent.</p> <p>Based on legal advices received, ESB appealed the decision to the Court of Appeal and the Appeal has been listed for hearing in October 2017. Pending the appeal hearing, no hearing on quantum (i.e. the actual amount of damages payable in respect of UCC's losses) will take place and the High Court has stayed its order on costs.</p> <p>In addition to the UCC claim, ESB has since the judgement in the UCC case, been served with 354 sets of proceedings relating to the flooding in Cork in November 2009. Details of amounts claimed in relation to these proceedings have not yet been received and therefore it is not possible to make a reliable estimate of their cost (should the Court of Appeal find against ESB) at this time. However, ESB does not anticipate that the total amount of damages awarded, if any, and related costs for all of the actions, including the Aviva / UCC action, would exceed its applicable insurance cover.</p> <p>On the basis of the internal and external legal advice received, ESB believes that it is more probable than not that the appeal will be successful and accordingly, no provision has been made for such claims in the financial statements.</p>	<p>The Audit and Risk Committee recognise that in relation to legal claims judgement is necessary on the appropriate level of disclosure and provisioning.</p> <p>To assist with the decision on the classification of the claim as a contingent liability, the Audit and Risk Committee carried out the following work:</p> <ul style="list-style-type: none">■ Considered both internal and external legal advice in relation to the case■ Challenged the views taken by management where necessary <p>Based on this work, the Audit and Risk Committee is satisfied that it is appropriate not to make a provision in relation to the case.</p>

ⓘ The above description of significant issues considered should be read in conjunction with the Independent Auditor's Report on pages 90 to 92 and the statement of accounting policies disclosed in note 1 of the financial statements on page 101.

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, is fair, balanced and understandable and provides all the necessary information for shareholders / stakeholders to assess the Group'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.

A separate paper was presented to the Audit and Risk Committee 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 the management for the preparation of the annual report and financial statements for the year ended 31 December 2016 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 and the external auditor
- 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, is fair, balanced and understandable and provides all the necessary information for shareholders / stakeholders to assess the Group's performance, business model and strategy.

AUDIT AND RISK COMMITTEE EFFECTIVENESS

As part of the Board evaluation process, the operation of the Audit and Risk Committee is also evaluated. Details of the evaluation process are set out on page 72. Based on the evaluation undertaken in 2016 by the Committee of its own operation and proceedings, the Committee introduced a number of improvements during the year including as regards the format of the Committee papers, reserving a greater part of Committee meetings to Committee members only, the identification of specific key risk items for consideration by the Committee, site visits by the Committee to ESB locations and greater participation by the external auditor in Committee meetings.

EXTERNAL AUDIT

Audit Quality

To maintain audit quality and provide comfort 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 auditor has identified the key audit risks and developed a robust approach.

The Audit and Risk Committee considers the external auditor's 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 auditor with the opportunity to raise any matters in confidence. The Audit and Risk Committee met with KPMG privately in February 2016.

Discussions with External Auditor

The Audit and Risk Committee has received and discussed a report from the external auditor on the findings from the audit, including those relating to the judgemental areas noted on pages 78 to 79.

After reviewing the presentations and reports from management and internal audit, and taking into account views expressed by the external auditor, the Audit and Risk Committee is satisfied that the financial statements appropriately address critical judgements and key estimates in the financial statements. 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.

Independence

The Audit and Risk Committee assesses the auditor's independence on an ongoing basis. The Committee considers the reappointment of the external auditor every five years and this process is subject to public tender. Details of the latest audit tender are outlined on page 81.

The Audit and Risk Committee is satisfied that the current auditor, KPMG, is both independent and objective.

Auditor Effectiveness

The effectiveness of the external auditor is reviewed annually, taking into account feedback from a questionnaire on the evaluation of the external auditor by the Audit and Risk Committee. The evaluation focuses on such areas as the robustness of the audit process, audit team, communications and governance. Overall the results for 2015 indicated a continued high level of satisfaction with KPMG and the services provided by them to ESB.

Non-Audit Services

The Audit and Risk Committee has a policy regarding the provision of non-audit services by the external auditor. The fees payable for non-audit services in any financial year should not exceed the audit fees for that year. A summary of the audit and non-audit fees paid to the external auditor is set out in note 9 to the financial statements. The Audit and Risk Committee is satisfied that the external auditor knowledge of the Group was an important factor in choosing them to provide the non-audit services and is also satisfied that the fees paid did not compromise their independence or integrity.

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. The Board is satisfied that at all times during the year at least one member of the Audit and Risk Committee had recent and relevant financial experience. Meetings, or part thereof, are routinely attended by the Board Chairman, Chief Executive and /or Deputy Chief Executive, Executive Director of Group Finance and Commercial, Head of Group Internal Audit, Group Risk Manager and representatives of the external auditor. Committee-only sessions are arranged at the beginning / end of meetings, as determined by the Audit and Risk Committee Chairman.

Auditor Tendering and Appointment

The Audit and Risk Committee oversees the relationship with the external auditor including the selection process for the audit tender and ensures that all tendering firms have such access as is necessary to information and individuals during the tendering process.

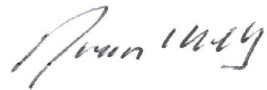
As noted last year, the Audit and Risk Committee has been keeping developments at EU level with regard to audit tenure under

close review. Taking these developments and market practice with regard to auditor rotation into account, a decision was taken to seek Ministerial approval to appoint a new external auditor following a tender process. KPMG, the current auditors, did not participate in the process.

The tender was carried out in compliance with EU, Government and ESB Procurement procedures. In February 2016, an Official Journal of the European Communities (OJEC) notice was issued requesting expressions of interest. Based on the expressions of interest received from 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 PwC be appointed as external auditor. The Board resolved to recommend the appointment of PwC to the Minister of Communications, Climate Action and Environment (with the consent of the Minister for Public Expenditure and Reform). In October 2016 the Minister confirmed the appointment of PwC as external auditor for up to three years (i.e. 2017, 2018 and 2019 financial years) with an option to extend for a further two years.

On behalf of the Audit and Risk Committee



Noreen O'Kelly,
Chairman, Audit and Risk Committee
22 February 2017

BOARD COMMITTEES IN 2016



TONY MERRIMAN
Chairman
Health, Safety and
Environment Committee

Role
The Health, Safety and Environment Committee's responsibilities are set out in its Terms of Reference, which include:

- Monitor the development of health, safety and environmental strategy and translation of the strategy into policies and programmes
- Receive information on key health, safety and environmental trends in Ireland, Europe and elsewhere, where relevant
- Receive reports on health, safety and environmental events and issues affecting ESB
- Monitor progress against agreed health, safety and environmental strategy and targets / KPIs

HEALTH, SAFETY AND ENVIRONMENT COMMITTEE

Committee Meetings
The Committee held four meetings during 2016. Other individuals and external advisers are invited to attend all or part of any meeting as appropriate. The members of the Committee and the number of meetings attended are set out below:

Members		Tenure	Meetings Attended
Tony Merriman, Chairman	Worker Board Member	9 years and 11 months	3
Séamus Mallon (to May 2016)	Independent Board Member	10 years	1
Pat O'Doherty	Chief Executive	5 years and 1 month	4
Peter O'Sullivan	Worker Board Member	1 year and 3 months	4
Anne Butler	Independent Board Member	1 year and 3 months	4

KEY ACTIVITIES OF THE HEALTH, SAFETY AND ENVIRONMENT COMMITTEE IN 2016

Performance Updates	Key safety risk updates to include lost time injuries, high-potential incidents, near-misses and good catches
Safety Improvement Plans	Oversight and governance of the annual Safety Improvement Plans in each business unit including the annual Dam Safety Report Progress updates on an incident and injury-free workplace
Health and Wellbeing	Oversight and governance on Health and Wellbeing programmes across all business units
Environmental	Oversight and governance on environmental management in ESB Networks and Generation and Wholesale Markets business units

See page 57 for further information on Health, Safety and Environment in 2016 as set out in the Corporate Social Responsibility section.



ELLVENA GRAHAM
Chairman
Remuneration and
Management Development
Committee

Role
The Remuneration and Management Development Committee's responsibilities are set out in its Terms of Reference, which include:

- Keep under review senior management succession and development plans
- Agree with the Chief Executive on his specific annual performance targets
- Set the remuneration packages for the Board's senior managers following recommendations from and / or a process of consultation with the Chief Executive
- Receive reports and monitor employee engagement

REMUNERATION AND MANAGEMENT DEVELOPMENT COMMITTEE

Committee Meetings
The Committee held four meetings during 2016. The members of the Committee and the number of meetings attended are set out below:

Members		Tenure	Meetings Attended
Ellvena Graham	Chairman	5 years	4
Noreen Wright	Independent Board Member	5 years	4
Andrew Hastings	Independent Board Member	1 year and 3 months	4

KEY ACTIVITIES OF THE REMUNERATION AND MANAGEMENT DEVELOPMENT COMMITTEE IN 2016

Chief Executive Targets	Reviewed performance against 2015 targets Set 2016 targets
Succession Planning	Review of succession planning and leadership competencies
New Appointment	Recommended the appointment of the Executive Director of Group Finance and Commercial

See page 75 for remuneration details of the Board.



ELLVENA GRAHAM
Chairman
Finance and Investment
Committee

Role
The Finance and Investment Committee's responsibilities are set out in its Terms of Reference, which include:

- Review annual capital budgets prior to submission to the Board
- Examine key policy issues concerning the financial requirements of the Group including credit ratings, borrowings, financial instruments and debt management
- Review the energy trading policies and procedures of the Group
- Examine major business proposals for investment and capital expenditure

FINANCE AND INVESTMENT COMMITTEE

Committee Meetings
The Committee held eight meetings during 2016. The members of the Committee and the number of meetings attended are set out below:

Members		Tenure	Meetings Attended
Ellvena Graham	Chairman	3 years and 9 months	8
Dave Byrne	Worker Board Member	3 years and 9 months	8
Pat O'Doherty	Chief Executive	3 years and 9 months	8
Andrew Hastings	Independent Board Member	1 year and 3 months	7
Seán Kelly	Worker Board Member	1 year and 3 months	6
Noreen O'Kelly	Independent Board Member	1 year and 3 months	8

KEY ACTIVITIES OF THE FINANCE AND INVESTMENT COMMITTEE IN 2016

Financial Performance Reporting	Reviewed and considered: Budget and the five-year business plan Quarterly capital expenditure reports Quarterly loans, swaps and bonds report
Investments Proposals	Reviewed and considered: Capital markets funding for new bond issue of €600 million June 2016 Renewables investments Business case realisation review for generation asset investments Smart Metering Programme Generation assets investment and overhaul programme Cost of capital and review of business hurdle rates
Performance Updates	Reviewed and considered: Update on Great Britain (GB) Supply market Novusmodus Fund performance ESB Trading Risk Position Generation from hydropower ESB Trading Strategy execution and review Participation in the GB capacity auction
Market Updates	Reviewed and considered: Implications of Brexit for ESB Electric Ireland market updates Foreign Exchange Risk Management Policy

Each Board Committee has its Terms of Reference reviewed and approved by the Board annually.

BOARD MEMBERS' REPORT

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 2016.

PRINCIPAL ACTIVITIES

The principal activities of the Group are the generation, transmission, distribution and supply of electricity in the Republic of Ireland (ROI) and Northern Ireland (NI). The Group also operates internationally, in related activities in Great Britain (GB) and is involved in a number of consultancy projects in Asia and Africa.

BUSINESS REVIEW

Commentaries on performance in the year ended 31 December 2016, 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 and its financial position and the principal risks faced by the Group are reflected in the reviews for each major business unit, the Financial Review and the Risk Report.

RESULTS AND DIVIDEND FOR THE YEAR

The financial results of the Group show a profit after tax of €186 million for the financial year 2016, compared with a profit of €286 million for 2015.

The dividend policy agreed with the Government in 2013 provides for targeted dividends of profit after tax of 38% in 2016 and 40% in 2017 and thereafter. An interim dividend for 2016 of €56 million (2.82 cent per unit of stock) was declared and paid in October 2016.

The Board is now recommending a final dividend for 2016 of 3.04 per cent per unit of stock, or €60 million in aggregate. This would bring the total dividends paid over the past decade to almost €1.5 billion.

SHARE CAPITAL

An Employee Share Ownership Plan (ESOP) market liquidity proposal was approved at the

Board meeting in May 2015. The objective of the proposal is to improve liquidity in the ESOP market where the ESOP Trustee is committing to spend €25 million of funds to acquire capital stock in the ESOP internal market. ESB will match the expenditure committed by the ESOP Trustee in the period 2014-2018. Acquisition of the capital stock by ESB will not commence until 2017. Further details are outlined in notes 17 and 30.

Details of the Group's share capital are outlined in note 17 to the financial statements.

BOARD MEMBERS

Biographies of the Board members are outlined on pages 66 to 67.

GOING CONCERN

The Group'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 1 to 63.

The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Financial Review on pages 38 to 43. Note 26 in 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.

The Group has considerable financial resources and the Board believe that the Group is well placed to manage its risks successfully. After making appropriate enquiries, the Board is satisfied that ESB has adequate resources to continue in operational existence for the foreseeable future. Accordingly, the Board continue to adopt the going concern basis in preparing the Group's financial statements.

VIABILITY STATEMENT

In accordance with the UK Code, the Board members have assessed the prospects of the Group over a longer period than that required in adopting the going concern basis of accounting.

The Group's assessment has been made over a five-year period, which is consistent with the time frame of the Group's business planning process. The assessment is based on consideration of ESB's current position and prospects, maintaining financial strength, progress against ESB Group Strategy, risk appetite, principal risks and how these are managed.

The Board believe that a five-year assessment is most appropriate as it aligns with the business planning process completed annually and 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 the Group's cash flows, committed funding and liquidity positions and examine future funding requirements and banking covenants, among others. 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 Free Funds from Operations (FFO) to Debt and EBITDA. Where appropriate, this analysis is carried out to evaluate the potential impact of the Group's principal risks actually occurring.

The Board recognises the significance of ESB's strong balance sheet. The Group's funding operations are of strategic importance and support capital expenditure, the refinancing of maturing debt and the maintenance of adequate liquidity. The Group's debt management strategy targets a debt portfolio profile with a diverse mix of counterparties, funding sources and maturity. The Group's revolving credit facility of €1.44 billion provides ESB with a substantial level of standby liquidity for the next five years. ESB's funding position reflects its underlying financial strength and at least BBB+ (or equivalent) credit ratings from all three major agencies. Further details on debt maturity are set out on page 43.

The Board has carried out a robust risk assessment of the principal risks facing the Group. These risks and the way they are being managed and mitigated are outlined on pages 20 to 23.

Based on the results of the above analysis, the Board members have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the five-year period of their assessment.

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 there were no protected disclosures made during the full year ending 31 December 2016.

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 2016.

MODERN SLAVERY ACT

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 organisation 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.

SUSTAINABILITY

Sustainability and Corporate Social Responsibility (CSR) concepts are embedded in all ESB operations and activities. Information on the Group's approach to sustainability and CSR is set out on pages 55 to 63 and are described in more detail in the independently verified annual sustainability report, which is available on the Group's website.

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 33 to the financial statements.

EVENTS SINCE THE BALANCE SHEET DATE

On 31 January 2017, ESB successfully raised a €500 million, 1.750% fixed rate Eurobond maturing in February 2029.

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, 2002 (S.I.No. 388 of 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 28 to 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 1 to 63.

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 directors 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 director is aware, there is no relevant audit information of which ESB's statutory auditors are unaware
- each director has taken all the steps that he or she ought to have taken as a director 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).

APPROVAL OF THE 2016 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, is fair, balanced and understandable.



Ellvena Graham, Chairman



Pat O'Doherty, Chief Executive

22 February 2017

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to the Stockholders
of Electricity
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Payments Act

"In ESB, we are always exploring new technologies that will help our customers be more energy efficient. Kingspan ESB is installing solar photovoltaic and storage bringing innovative renewable energy solutions to our business customers. This supports ESB's journey to a low-carbon future. It's an exciting time in ESB and we are glad to be a part of it."

Cera Slevin and Fergus Sharkey
Generation and Wholesale Markets



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STATEMENT OF BOARD MEMBERS' RESPONSIBILITIES

The Board members are responsible for preparing the annual report, incorporating financial statements for ESB (the Parent) and for ESB Group.

Under ESB's governing regulations, adopted pursuant to the Electricity Supply Acts 1927 to 2004, 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), to make to the Minister a report of its proceedings during the preceding year. The Companies Act 2014 provides that Group financial statements should be prepared in accordance with IFRS as adopted by the European Union and 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 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 for each of the Group and ESB on pages 93 to 168 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 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 ESB Regulations.

The Board members are 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.

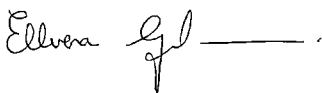
The Board members are also responsible for the maintenance and integrity of the corporate and financial information included on the Group's and ESB's website www.esb.ie.

Note: Legislation in the Republic of Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

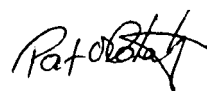
Each of the Board members, confirm that, to the best of each person's knowledge and belief:

- 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 2016 and of the profit of the Group for the year then ended 31 December 2016;
- 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



Ellvena Graham, Chairman



Pat O'Doherty, Chief Executive

INDEPENDENT AUDITOR'S REPORT TO THE STOCKHOLDERS OF ELECTRICITY SUPPLY BOARD (ESB)

OPINION AND CONCLUSIONS ARISING FROM OUR AUDIT

1. OUR OPINION ON THE FINANCIAL STATEMENTS IS UNMODIFIED

As the auditor appointed by the Minister for Communications, Climate Action and Environment with the consent of the Minister for Finance, under Section 7 of the Electricity (Supply) Act 1927, we have audited the financial statements of ESB for the year ended 31 December 2016 set out on pages 93 to 168. Our audit was conducted in accordance with International Standards on Auditing (ISAs) (UK & Ireland).

In our opinion:

- the Group financial statements give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2016 and of its profit for the year then ended;
- the Company balance sheet gives a true and fair view of the assets, liabilities and financial position of the Company as at 31 December 2016;
- the Group financial statements have been properly prepared in accordance with IFRS as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with IFRS as adopted by the European Union as applied in accordance with the provisions of the Companies Act 2014 and as applied by the Electricity (Supply) Acts 1927 to 2004; and
- the Company financial statements and Group financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014 and as applied by the Electricity (Supply) Acts 1927 to 2004.

2. OUR ASSESSMENT OF RISKS OF MATERIAL MISSTATEMENT

In arriving at our audit opinion above on the Group financial statements the risks of material misstatement that had the greatest effect on our Group audit were as follows:

Carrying value of goodwill and long-lived assets: €10.9 billion (2015: €11.3 billion) Refer to page 78 (Report of the Audit and Risk Committee), page 103 (accounting policy) and notes 10, 11 and 12 to the financial statements.

The Risk

ESB has long-lived assets with a carrying value of €10.7 billion on its balance sheet at 31 December 2016 (€11.1 billion at 31 December 2015) and goodwill associated with the electricity networks business in Northern Ireland (NIE Networks) of €177 million (€207 million at 31 December 2015).

The most significant of these long-lived assets are the Republic of Ireland and Northern Ireland network assets and the Group's power generation portfolio. Given the magnitude of these assets relative to ESB's balance sheet, any

potential impairment could have a significant impact on the results of the Group.

Management review the carrying value of the network assets and other significant long-lived assets for any indications of impairment on an annual basis. Management produce detailed forecasts and discounted cash flow models in the annual assessment of goodwill and when indicators of impairment exist.

Due to the inherent uncertainty in estimating long-term cash flows associated with long-lived assets and goodwill, this is considered a key audit risk.

Our Response

In relation to the Group's power generation portfolio, we obtained an understanding of the Group's value in use models, including the assumptions employed, the output, availability and profitability of the assets. We challenged the key assumptions on future projected cash flows and compared the assumptions to externally derived data, where possible, and performed sensitivity analysis thereon.

We compared the Regulatory Asset Base of the Group's Republic of Ireland networks transmission and distribution assets (on which future regulated income is determined) with the net book value of the assets in the financial statements. We also inspected relevant correspondence between the Commission for Energy Regulation and the Group and considered the implications for the financial statements.

In respect of the NIE Networks' assets and related goodwill, we assessed the reasonableness of management's assumptions used in their impairment models, which are based on the latest price control determination, including the discount rate used. We compared management's assumptions, where possible, to third party data and performed sensitivity analysis on the key assumptions.

For all value in use models, we challenged the key assumptions for the earnings and cash flow forecasts, the discount rate used and, when relevant, the value of the impairment charged in the year. We considered whether the disclosures made in respect of the risks, estimation uncertainty and the sensitivity of the impairment assessment to changes in key assumptions are adequate.

Derivatives and hedging – hedging arrangements: net liability €467 million (2015: net liability €511 million). Refer to page 79 (Report of the Audit and Risk Committee), page 104 (accounting policy) and note 20 to the financial statements.

The Risk

The Group uses derivative and other contracts to hedge its exposure to foreign exchange, interest rate, commodity and energy price risk arising from operational, financing and investing activities. The principal derivatives used include inflation linked swaps, interest rate swaps, currency swaps, foreign currency contracts and indexed swap and other commercial contracts relating to the purchase of fuel and sale of electricity. These contracts are designated into a variety of cash flow hedging relationships, with the exception of the Group's inflation linked swaps which do not qualify for hedge accounting. The hedge designations and associated documentation requirements of the applicable accounting standards are complex and the valuation of all of these derivatives is judgemental and sensitive to movements in underlying variables (such as benchmark interest rate indices and commodity futures). Modest changes to these variables could have a significant impact on the financial position of the Group.

Our Response

Our audit procedures included the documentation and assessment of the design and implementation of valuation processes and controls, the use of valuation specialists in assessing the valuation of the derivative contracts, comparison of the Group's valuation assumptions to externally derived data to assess whether the assumptions used by the Group are reasonable. We also obtained and assessed the Group's hedge accounting documentation and associated supporting calculations to ascertain whether hedge accounting was appropriate, documented and tested on a periodic basis. We assessed whether the disclosures reflected the risks inherent in the accounting for derivative financial instruments.

ESB Defined Benefit Pension Scheme liability: €525 million (2015: €648 million) Refer to page 78 (Report of the Audit and Risk Committee), page 106 (accounting policy) and note 22 to the financial statements.

The Risk

Pension arrangements for the majority of ESB's employees are funded through the ESB Defined Benefit Pension Scheme ("the Scheme"). The regulations of the Scheme stipulate that benefits are to be provided to members of the Scheme according to an agreed formula, however these are not linked to the contributions required to be made by ESB under the Scheme rules. Consequently ESB has no legal obligation to increase contributions to maintain benefits in the event of a deficit. Should a 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

INDEPENDENT AUDITOR'S REPORT TO THE STOCKHOLDERS OF ELECTRICITY SUPPLY BOARD (ESB) (continued)

an amending Scheme for Ministerial approval. This does not conform to a typical 'balance of cost' defined benefit scheme where the employer is liable to pay the balance of contributions to fund deficits. However, historically, on a number of occasions, when a deficit was reported by the Scheme Actuary and following consultation with the various affected parties, both ESB and employees increased their contributions to the Scheme to address this.

In 2010 a new Pensions Agreement was reached between ESB and the Scheme members which included benefit and other actuarial changes to the Scheme which were borne by the Scheme members. The fixed contribution rates for ESB and members were not changed but ESB also agreed to pay a once off contribution of €591 million (the "Contribution") and the Scheme was closed to new joiners. In the 2010 financial statements, ESB stated that it did not intend to make any further contributions to the Scheme, other than the ongoing fixed contributions. This was stated explicitly in the 2010 financial statements and in subsequent periods, ESB has not made any contributions to the Scheme other than the agreed contributions. As a consequence, the accounting for the Scheme was amended in 2010 to only accrue for the Contribution within ESB's balance sheet, and to account for the ongoing fixed percentage of salary contributions relating to current service costs in the income statement as pensionable service is provided.

In late 2013, a dispute arose between ESB and its unions in relation to the pension scheme which ultimately resulted in a Labour Relations Commission brokered agreement between the parties. This agreement obliges ESB to accurately describe the Scheme in its accounts, re-iterated the obligation on the parties to consult in the event of a deficit and noted that neither party had an intention to adjust the level of contributions to the Scheme at that time. This agreement has not changed the Board's views in relation to its accounting for the Scheme and the Board has further re-confirmed that it is not ESB's intention to make any further contributions to the Scheme. It consequently continues to be the Board's view that it has no legal or constructive obligation in this regard and that the accounting treatment adopted in 2010 continues to apply.

This is a significant judgement as the interpretation of the Scheme rules, whether ESB has a legal or constructive obligation to fund the Scheme, and the associated accounting are complex matters.

Our Response

Our audit procedures included obtaining an understanding of ESB's legal position from internal and external legal counsel. We received representations from the Board

members that ESB do not intend to make any further payments to the Scheme other than those provided for in the 2010 pension agreement and a fixed continuing contribution of Scheme members' salaries. We considered other documentation and internal briefing notes provided to us by ESB in relation to the issue. We also had regard to ESB's actions in the period since 2010, during which no additional contributions were made to the Scheme. We considered whether the accounting and disclosures made in the financial statements in respect of this significant judgemental matter were appropriate and in accordance with the relevant accounting guidance. We also reconsidered the appropriateness of the accounting in the context of IAS 19 Employee Benefits.

3. OUR APPLICATION OF MATERIALITY AND AN OVERVIEW OF THE SCOPE OF OUR AUDIT

The materiality for the Group financial statements as a whole was set at €17 million (2015: €17 million). This has been determined using circa 4% of the benchmark of profit before taxation, normalised to exclude this year's €188 million fair value loss on the Group's inflation linked swaps as disclosed in note 7 to the financial statements.

We have determined profit before tax excluding the effect of once-off items, in our professional judgement, to be the most appropriate benchmark as we consider it to be one of the principal considerations for members of the Company in assessing the financial performance of the Group.

We report to the ESB Audit and Risk Committee all corrected and uncorrected misstatements we identified through our audit with a value in excess of €0.5 million, in addition to other audit misstatements below that threshold that we believe warrant reporting on qualitative grounds.

Our Group audit scope focused on the Group's four key reportable segments, in addition to the head office function, all of which were subject to a full scope audit for the year ended 31 December 2016. Together these locations represent the principal business units of the Group and account for in excess of 95% (2015: 95%) of the Group's external revenue, profit after tax and total assets, as at and for the year ended 31 December 2016. Audits of these locations are performed centrally by the Group engagement team and to materiality determined individually for each component.

4. WE HAVE NOTHING TO REPORT ON THE DISCLOSURES OF PRINCIPAL RISKS

Based on the knowledge we acquired during our audit, we have nothing material to add or draw attention to in relation to:

- the directors' viability statement on

page 84, concerning the principal risks, their management, and, based on that, the directors' assessment and expectations of the Group's continuing in operation over the five years to 2022; or

- the disclosures in note 1 of the financial statements concerning the use of the going concern basis of accounting.

5. WE HAVE NOTHING TO REPORT IN RESPECT OF THE MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

ISAs (UK & Ireland) require that we report to you if, based on the knowledge we acquired during our audit, we have identified information in the annual report that contains a material inconsistency with either that knowledge or the financial statements, a material misstatement of fact, or that is otherwise misleading.

In particular, we are required to report to you if:

- we have identified any inconsistencies between the knowledge we acquired during our audit and the directors' statement that they consider the annual report and financial statements as a whole is fair, balanced and understandable and provides information necessary for shareholders to assess the entity's position and performance, business model and strategy; or
- the Audit and Risk Committee Report does not appropriately disclose those matters that we communicated to the Audit and Risk Committee.

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 financial control required under the Code as included in the Board Governance Report on pages 69 to 75 does not reflect the Group's compliance with paragraph 13.1(iii) 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 and we report if it does not.

In accordance with the terms of our engagement letter, we review:

- the Board members' statement, set out on page 84, in relation to going concern and viability statement;
- the part of the Board Governance Report on pages 69 to 75 relating to Board's compliance with the provisions of the UK Corporate Governance Code and the Irish Corporate Governance Annex specified for our review; and
- certain elements of disclosures in the report to stockholders by the Remuneration and Management Development Committee.

In addition, the Companies Act 2014 require us to report to you if, in our opinion, the disclosures of directors' remuneration and transactions specified by law are not made.

INDEPENDENT AUDITOR’S REPORT TO THE STOCKHOLDERS OF ELECTRICITY SUPPLY BOARD (ESB) (continued)

6. OUR CONCLUSIONS ON OTHER MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY THE COMPANIES ACT 2014 ARE SET OUT BELOW

We have obtained all the information and explanations which we considered necessary for the purposes of our audit.

In our opinion the accounting records of the Company were sufficient to permit the financial statements to be readily and properly audited and the financial statements are in agreement with the accounting records.

In our opinion the information given in the Board members’ report is consistent with the financial statements and the description in the Corporate Governance Statement of the main features of the internal control and risk management systems in relation to the process for preparing the Group financial statements is consistent with the Group financial statements.

BASIS OF OUR REPORT, RESPONSIBILITIES AND RESTRICTIONS ON USE

As explained more fully in the Statement of Board members’ Responsibilities set out on page 89, the Board members are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the Group and Company financial statements in accordance with applicable law and International Standards on Auditing

(ISAs) (UK & Ireland). Those standards require us to comply with the Financial Reporting Council’s Ethical Standards for Auditors.

An audit undertaken in accordance with ISAs (UK & Ireland) involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Group’s circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements.

In addition, we read all the financial and non-financial information in the annual report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing our audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Whilst an audit conducted in accordance with ISAs (UK & Ireland) is designed to provide reasonable assurance of identifying material misstatements or omissions it is not guaranteed to do so. Rather the auditor plans the audit to determine the extent of

testing needed to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements does not exceed materiality for the financial statements as a whole. This testing requires us to conduct significant audit work on a broad range of assets, liabilities, income and expense as well as devoting significant time of the most experienced members of the audit team, in particular the engagement partner responsible for the audit, to subjective areas of accounting and reporting.

This report is made solely to the stockholders of ESB, as a body, in accordance with section 391 of the Companies Act 2014, made applicable to ESB by virtue of the Regulations adopted by it as its governing regulations under the Electricity (Supply) Act, 1927, as amended by the Electricity (Supply) (Amendment) Act 2004. Our audit work has been undertaken so that we might state to the stockholders of ESB those matters we are required to state to them in an auditor’s report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than ESB and its stockholders, as a body, for our audit work, for this report, or for the opinions we have formed.

Sean O’Keefe
for and on behalf of
KPMG
Chartered Accountants, Statutory Audit Firm
Dublin, Ireland
22 February 2017

GROUP INCOME STATEMENT

For the year ended 31 December 2016

	Notes	2016 € '000	Excluding exceptional items € '000	2015 Exceptional items note 4 € '000	Including exceptional items € '000
Revenue	2	3,211,751	3,335,401	-	3,335,401
Other operating income	5	35,524	28,943	-	28,943
Operating costs	4/6	(2,649,949)	(2,728,977)	(104,237)	(2,833,214)
Operating profit		597,326	635,367	(104,237)	531,130
Net interest on borrowings	7	(170,487)	(206,957)	-	(206,957)
Financing charges	7	(36,823)	(39,659)	-	(39,659)
Fair value movement on financial instruments	7	(190,162)	30,234	-	30,234
Finance income	7	9,048	1,294	-	1,294
Net finance cost		(388,424)	(215,088)	-	(215,088)
Share of equity accounted investees loss	13	(15,257)	(9,176)	-	(9,176)
Profit before taxation		193,645	411,103	(104,237)	306,866
Income tax expense	18	(7,454)	(18,553)	(2,073)	(20,626)
Profit after taxation		186,191	392,550	(106,310)	286,240
Attributable to:					
Equity holders of the Parent		187,848	395,852	(106,310)	289,542
Non-controlling interest		(1,657)	(3,302)	-	(3,302)
Profit for the financial year		186,191	392,550	(106,310)	286,240

Notes 1 to 33 form an integral part of these financial statements.

GROUP STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2016

	2016 € '000	2015 € '000
Profit for the financial year	186,191	286,240
Items that will not be reclassified subsequently to profit or loss:		
NIE Networks pension scheme actuarial (losses) / gains	(66,520)	17,220
Tax on items that will not be reclassified to profit or loss	9,839	(6,664)
	(56,681)	10,556
Items that are or may be reclassified subsequently to profit or loss:		
Effective hedge of a net investment in foreign subsidiary	3,004	(1,362)
Translation differences on consolidation of foreign subsidiaries	(48,318)	33,036
Fair value gains / (losses) on cash flow hedges	91,530	(16,421)
Fair value losses on cash flow hedges in equity accounted investees	(3,845)	(1,031)
Transferred to income statement on cash flow hedges	(3,052)	(66,527)
Tax on items that are or may be reclassified subsequently to profit or loss	(10,831)	1,855
Tax on items that are or may be reclassified subsequently to profit or loss for equity accounted investees	587	129
Tax on items transferred from other comprehensive income (OCI)	(69)	7,799
	29,006	(42,522)
Other comprehensive income for the financial year, net of tax	(27,675)	(31,966)
Total comprehensive income for the financial year	158,516	254,274
Attributable to:		
Equity holders of the Parent	160,173	257,576
Non-controlling interest	(1,657)	(3,302)
Total comprehensive income for the financial year	158,516	254,274

GROUP BALANCE SHEET

As at 31 December 2016

	Notes	2016 € '000	2015 € '000
ASSETS			
Non-current assets			
Property, plant and equipment	10	10,438,562	10,872,836
Intangible assets	11	273,221	227,740
Goodwill	12	177,242	206,759
Investments in equity accounted investees	13	80,990	94,850
Financial asset investments	13	56,502	62,563
Trade and other receivables	15	69,995	44,777
Derivative financial instruments	20	183,999	236,565
Deferred tax assets	18	200,741	207,246
Total non-current assets		11,481,252	11,953,336
Current assets			
Inventories	14	73,172	96,670
Derivative financial instruments	20	203,192	214,400
Current tax asset		15,338	7,853
Trade and other receivables	15	770,081	751,177
Cash and cash equivalents	16	363,624	133,863
Total current assets		1,425,407	1,203,963
Total assets		12,906,659	13,157,299
EQUITY			
Capital stock	17	1,979,882	1,979,882
Translation reserve		6,062	51,376
Cash flow hedging and other reserves		124,119	49,799
Other reserves		(220,322)	(151,098)
Retained earnings		2,037,459	1,930,558
Equity attributable to equity holders of the Parent		3,927,200	3,860,517
Non-controlling interest	17	(3,531)	(1,874)
Total equity		3,923,669	3,858,643
LIABILITIES			
Non-current liabilities			
Borrowings and other debt	19	4,398,113	4,690,314
Liability – ESB pension scheme	22	370,308	493,148
Liability – NIE Networks pension scheme	21	170,543	142,069
Employee related liabilities	22	78,396	91,057
Trade and other payables	23	-	8,686
Deferred income and government grants	24	486,531	510,011
Provisions	25	237,153	196,431
Deferred tax liabilities	18	709,442	751,082
Derivative financial instruments	20	753,968	754,537
Total non-current liabilities		7,204,454	7,637,335
Current liabilities			
Borrowings and other debt	19	489,330	418,825
Liability – ESB pension scheme	22	154,504	154,981
Employee related liabilities	22	64,305	54,353
Trade and other payables	23	835,018	695,535
Deferred income and government grants	24	50,021	48,273
Provisions	25	84,822	79,000
Current tax liabilities		750	3,250
Derivative financial instruments	20	99,786	207,104
Total current liabilities		1,778,536	1,661,321
Total liabilities		8,982,990	9,298,656
Total equity and liabilities		12,906,659	13,157,299

Ellvena Graham, Chairman

Pat O'Doherty, Chief Executive

Pat Fenlon, Executive Director, Group Finance and Commercial

PARENT BALANCE SHEET

As at 31 December 2016

	Notes	2016 € '000	2015 € '000
ASSETS			
Non-current assets			
Property, plant and equipment	10	7,084,170	7,102,256
Intangible assets	11	206,832	159,386
Investment in equity accounted investee	13	100,000	100,000
Investments in subsidiary undertakings	13	61,782	61,782
Derivative financial instruments	20	82,174	92,905
Deferred tax assets	18	67,960	97,586
Total non-current assets		7,602,918	7,613,915
Current assets			
Inventories	14	43,176	66,843
Derivative financial instruments	20	138,642	139,398
Current tax asset		5,897	2,250
Trade and other receivables	15	3,091,981	3,181,023
Cash and cash equivalents	16	235,991	17,202
Total current assets		3,515,687	3,406,716
Total assets		11,118,605	11,020,631
EQUITY			
Capital stock	17	1,979,882	1,979,882
Cash flow hedging and other reserves		28,959	(35,883)
Retained earnings		1,774,267	1,625,100
Equity attributable to equity holders of the Parent		3,783,108	3,569,099
LIABILITIES			
Non-current liabilities			
Borrowings and other debt	19	1,409,367	1,488,584
Liability – ESB pension scheme	22	370,308	493,148
Employee related liabilities	22	78,197	90,829
Deferred income and government grants	24	468,556	500,434
Provisions	25	222,234	166,733
Deferred tax liabilities	18	468,373	458,829
Derivative financial instruments	20	21,033	42,669
Total non-current liabilities		3,038,068	3,241,226
Current liabilities			
Borrowings and other debt	19	132,858	365,397
Liability – ESB pension scheme	22	154,504	154,981
Employee related liabilities	22	56,095	46,460
Trade and other payables	23	3,789,195	3,393,612
Deferred income and government grants	24	33,108	33,108
Provisions	25	66,540	64,576
Current tax liabilities		-	1,513
Derivative financial instruments	20	65,129	150,659
Total current liabilities		4,297,429	4,210,306
Total liabilities		7,335,497	7,451,532
Total equity and liabilities		11,118,605	11,020,631

Ellvena Graham, Chairman

Pat O'Doherty, Chief Executive

Pat Fenlon, Executive Director, Group Finance and Commercial

GROUP STATEMENT OF CHANGES IN EQUITY

As at 31 December 2016

	Capital stock € '000	Translation reserve € '000	Cash flow hedging and other reserve € '000	Other reserves ¹ € '000	Retained earnings € '000	Total € '000	Non-controlling interest € '000	Total equity € '000
Reconciliation of changes in equity								
Balance at 1 January 2015	1,979,882	19,702	123,995	(144,031)	1,907,807	3,887,355	1,676	3,889,031
Total comprehensive income / (loss) for the year								
Profit for the financial year	-	-	-	-	289,542	289,542	(3,302)	286,240
NIE Networks pension scheme actuarial gains	-	-	-	17,220	-	17,220	-	17,220
Revaluation reserves on acquisition of Synergen Power Ltd.	-	-	-	(5,543)	5,543	-	-	-
Translation differences net of hedging	-	31,674	-	-	-	31,674	-	31,674
Cash flow hedges:								
- Net fair value losses	-	-	(16,421)	-	-	(16,421)	-	(16,421)
- Transfers to income statement								
- Finance cost (interest)	-	-	7,722	-	-	7,722	-	7,722
- Finance cost (foreign translation movements)	-	-	(63,718)	-	-	(63,718)	-	(63,718)
- Other operating expenses	-	-	(10,531)	-	-	(10,531)	-	(10,531)
- Fair value losses for hedges in equity accounted investees	-	-	(1,031)	-	-	(1,031)	-	(1,031)
Tax on items taken directly to statement of comprehensive income (OCI)	-	-	1,855	(6,664)	-	(4,809)	-	4,809
Tax on items transferred to income statement	-	-	7,799	-	-	7,799	-	7,799
Tax on items taken directly to OCI for equity accounted investees	-	-	129	-	-	129	-	129
Total comprehensive income / (loss) for the year	-	31,674	(74,196)	5,013	295,085	257,576	(3,302)	254,274
Changes in ownership interests								
Acquisition of subsidiary with NCI	-	-	-	-	-	-	127	127
Total changes in ownership interests	-	-	-	-	-	-	127	127
Transactions with owners recognised directly in equity								
Dividends	-	-	-	-	(272,334)	(272,334)	(375)	(272,709)
ESOP repurchase provision	-	-	-	(12,080)	-	(12,080)	-	(12,080)
Balance at 31 December 2015	1,979,882	51,376	49,799	(151,098)	1,930,558	3,860,517	(1,874)	3,858,643
Balance at 1 January 2016	1,979,882	51,376	49,799	(151,098)	1,930,558	3,860,517	(1,874)	3,858,643
Total comprehensive income / (loss) for the year								
Profit for the financial year	-	-	-	-	187,848	187,848	(1,657)	186,191
NIE Networks pension scheme actuarial losses	-	-	-	(66,520)	-	(66,520)	-	(66,520)
Revaluation reserves on acquisition of Synergen Power Ltd.	-	-	-	(5,543)	5,543	-	-	-
Translation differences net of hedging	-	(45,314)	-	-	-	(45,314)	-	(45,314)
Cash flow hedges:								
- Net fair value gains	-	-	91,530	-	-	91,530	-	91,530
- Transfers to income statement								
- Finance cost (interest)	-	-	6,274	-	-	6,274	-	6,274
- Finance cost (foreign translation movements)	-	-	(10,414)	-	-	(10,414)	-	(10,414)
- Other operating expenses	-	-	1,088	-	-	1,088	-	1,088
- Fair value losses for hedges in equity accounted investees	-	-	(3,845)	-	-	(3,845)	-	(3,845)
Tax on items taken directly to statement of comprehensive income (OCI)	-	-	(10,831)	9,839	-	(992)	-	(992)
Tax on items transferred to income statement	-	-	(69)	-	-	(69)	-	(69)
Tax on items taken directly to OCI for equity accounted investees	-	-	587	-	-	587	-	587
Total comprehensive income / (loss) for the year	-	(45,314)	74,320	(62,224)	193,391	160,173	(1,657)	158,516
Transactions with owners recognised directly in equity								
Dividends	-	-	-	-	(86,490)	(86,490)	-	(86,490)
ESOP repurchase provision	-	-	-	(7,000)	-	(7,000)	-	(7,000)
Balance at 31 December 2016	1,979,882	6,062	124,119	(220,322)	2,037,459	3,927,200	(3,531)	3,923,669

¹Other reserves comprises of (i) a €33.2 million revaluation reserve (December 2015: €38.8 million) which arose following the acquisition of the remaining 30% of Synergen Power Limited in 2009; (ii) other reserves relating to the NIE Networks pension scheme of (€228.6) million (December 2015: (€171.9) million); (iii) 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 and; (iv) an ESOP repurchase provision which relates to the amount that ESB has committed to date to purchase from the ESOP internal market (€19.1) million (December 2015: (€12.1) million). Refer to note 17 for information on the ESOP repurchase.

PARENT STATEMENT OF CHANGES IN EQUITY

As at 31 December 2016

	Capital stock € '000	Cash flow hedging and other reserves € '000	Retained earnings € '000	Total € '000
Reconciliation of changes in equity				
Balance at 1 January 2015	1,979,882	(47,795)	1,514,040	3,446,127
Total comprehensive income / (loss) for the year				
Profit for the financial year	-	-	383,394	383,394
Cash flow hedges:				
- Net fair value gains	-	55,089	-	55,089
- Transfers to income statement				
- Finance cost (interest)	-	(1,487)	-	(1,487)
- Finance cost (foreign translation movements)	-	(63,718)	-	(63,718)
- Other operating expenses	-	37,537	-	37,537
Tax on items taken directly to statement of comprehensive income (OCI)	-	(6,887)	-	(6,887)
Tax on items transferred to income statement	-	3,458	-	3,458
Total comprehensive income / (loss) for the year	-	23,992	383,394	407,386
Transactions with owners recognised directly in equity				
Dividends	-	-	(272,334)	(272,334)
ESOP repurchase provision ¹	-	(12,080)	-	(12,080)
Balance at 31 December 2015	1,979,882	(35,883)	1,625,100	3,569,099
Balance at 1 January 2016	1,979,882	(35,883)	1,625,100	3,569,099
Total comprehensive income / (loss) for the year				
Profit for the financial year	-	-	235,657	235,657
Cash flow hedges:				
- Net fair value gains	-	68,575	-	68,575
- Transfers to income statement				
- Finance cost (interest)	-	(4,364)	-	(4,364)
- Finance cost (foreign translation movements)	-	(10,414)	-	(10,414)
- Other operating expenses	-	28,304	-	28,304
Tax on items taken directly to statement of comprehensive income (OCI)	-	(8,568)	-	(8,568)
Tax on items transferred to income statement	-	(1,691)	-	(1,691)
Total comprehensive income / (loss) for the year	-	71,842	235,657	307,499
Transactions with owners recognised directly in equity				
Dividends	-	-	(86,490)	(86,490)
ESOP repurchase provision ¹	-	(7,000)	-	(7,000)
Balance at 31 December 2016	1,979,882	28,959	1,774,267	3,783,108

¹ The ESOP repurchase provision relates to the amount that ESB has committed to date to repurchase from the ESOP internal market. Refer to note 17 for information on the ESOP repurchase.

GROUP CASH FLOW STATEMENT

For the year ended 31 December 2016

	Notes	2016 € '000	2015* € '000
Cash flows from operating activities			
Profit after taxation		186,191	286,240
Adjustments for:			
Depreciation and amortisation	6	760,409	744,678
Amortisation of supply contributions and other deferred income	24	(58,548)	(57,530)
Net emissions costs		(27,348)	30,992
Profit on disposal of non-current assets		(926)	(590)
Profit on disposal of subsidiaries and equity accounted investees	5	(9,383)	(6,852)
Net finance cost	7	388,424	215,088
Impact of fair value adjustments in operating costs		10,395	9,611
Losses from equity accounted investees	13	15,257	9,176
Income tax expense	18	7,454	20,626
Dividend received		(1,139)	-
Impairment charge	4 / 6	4,970	104,237
Operating cash flows before changes in working capital and provisions		1,275,756	1,355,676
(Credit) / charge in relation to provisions		(1,170)	14,821
Charge in relation to employee related liabilities		51,446	34,581
Utilisation of provisions		(19,484)	(8,889)
Utilisation of employee related liabilities		(227,821)	(190,725)
Deferred income received*		38,994	32,009
(Increase) / decrease in trade and other receivables		(35,735)	20,958
Decrease / (increase) in inventories		22,301	(20,191)
Increase / (decrease) in trade and other payables		146,385	(43,446)
Cash generated from operations		1,250,672	1,194,794
Current tax paid		(27,974)	(50,934)
Financing costs paid		(211,480)	(254,844)
Net cash inflow from operating activities		1,011,218	889,016
Cash flows from investing activities			
Purchase of property, plant and equipment		(721,437)	(730,918)
Purchase of intangible assets		(39,188)	(42,108)
Proceeds from sale of non-current assets		3,132	2,528
Proceeds from sale of subsidiaries and equity accounted investees		6,831	4,682
Dividend received from associate undertaking		1,139	-
Purchase of financial assets		(10,066)	(13,066)
Interest received		662	1,294
Net cash outflow from investing activities		(758,927)	(777,588)
Cash flows from financing activities			
Dividends paid	17	(86,490)	(272,709)
Repayments of term debt facilities and finance leases		(84,424)	(357,715)
Proceeds from the issue of new debt		401,121	274,334
(Decrease) / increase in other borrowings (net)		(228,847)	249,259
Payments on inflation linked interest rate swaps		(15,926)	(17,530)
Net cash outflow from financing activities		(14,566)	(124,361)
Net increase / (decrease) in cash and cash equivalents		237,725	(12,933)
Cash and cash equivalents at 1 January	16	133,863	143,731
Effect of exchange rate fluctuations on cash held		(7,964)	3,065
Cash and cash equivalents at 31 December	16	363,624	133,863

* Comparative amounts in the Group cash flow statement have been regrouped where necessary to ensure consistency in the two years being recorded.

PARENT CASH FLOW STATEMENT

For the year ended 31 December 2016

	Notes	2016 € '000	2015* € '000
Cash flows from operating activities			
Profit after taxation		235,657	383,394
Adjustments for:			
Depreciation and amortisation	24	512,999	491,381
Amortisation of supply contributions and other deferred income		(33,118)	(32,422)
Net emissions cost		(31,288)	25,642
Loss / (profit) on disposal of non-current asset		729	(1,398)
Net finance cost		93,232	119,770
Impact of fair value movement on financial instruments in operating costs		559	(1,110)
Dividend income from subsidiary undertakings		(8,680)	(8,950)
Income tax expense		44,726	50,925
Operating cash flows before changes in working capital and provisions		814,816	1,027,232
Charge in relation to provisions		2,379	2,096
Charge in relation to employee related liabilities		35,318	20,047
Utilisation of provisions		(6,395)	(8,266)
Utilisation of employee related liabilities		(192,123)	(154,939)
Deferred income received*		1,239	1,034
Increase in trade and other receivables		(96,484)	(89,067)
Decrease / (increase) in inventories		22,470	(15,413)
Increase in trade and other payables		517,970	206,032
Cash generated from operations		1,099,190	988,756
Current tax paid		(19,287)	(41,783)
Interest paid		(134,785)	(157,270)
Net cash inflow from operating activities		945,118	789,703
Cash flows from investing activities			
Purchase of property, plant and equipment		(399,600)	(490,865)
Purchase of intangible assets		(33,122)	(39,362)
Proceeds from the sale of non-current assets		1,863	2,825
Interest received		46,290	51,903
Dividends received		8,680	8,950
Net cash outflow from investing activities		(375,889)	(466,549)
Cash flows from financing activities			
Dividends paid		(86,490)	(272,334)
Repayments of term debt facilities and finance leases		(12,739)	(339,953)
(Decrease) / increase in other borrowings (net)		(251,211)	249,951
Net cash inflow from financing activities		(350,440)	(362,336)
Net increase / (decrease) in cash and cash equivalents		218,789	(39,182)
Cash and cash equivalents at 1 January	16	17,202	56,384
Cash and cash equivalents at 31 December	16	235,991	17,202

* Comparative amounts in the Parent cash flow statement have been regrouped where necessary to ensure consistency in the two years being recorded.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES

1. 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 2016 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) and, in the case of the Parent, as applied in accordance with the Companies Act 2014. The Companies Act 2014 provide a Parent Company 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 those IFRS standards and IFRIC (International Financial Reporting Interpretations Committee) interpretations issued and effective for accounting periods ending on or before 31 December 2016. 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.

These financial statements are prepared in euro, and except where otherwise stated, all financial information presented has been rounded to the nearest thousand.

The preparation of financial statements in conformity with EU IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. These estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances.

The estimates and underlying assumptions are reviewed on an ongoing basis. Judgements made by management in the application of EU IFRS that have a significant effect on the financial statements and estimates with a significant risk of material adjustment in the next year are discussed in note 29 to the financial statements.

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 new standards as set out below.

The Board members consider that the Group has adequate resources to continue in operational existence for the foreseeable future. The financial statements are therefore prepared on a going concern basis. Further details of the Group's liquidity position are provided in note 29 of the financial statements.

2. 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 2016. 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.

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

From 1 January 2010 the Group applied IFRS 3 Business Combinations (2008) in accounting for business combinations. From this date onwards, 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.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Group incurs 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.

Acquisitions prior to 1 January 2004 (date of transition to IFRSs)

As part of its transition to IFRSs, the Group elected to restate only those business combinations that occurred on or after 1 January 2003. In respect of acquisitions prior to 1 January 2003, goodwill represents the amount recognised under the Group's previous accounting framework, UK GAAP.

Control

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. In the Parent financial statements, investments in subsidiaries are carried at cost less any impairment charges.

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 consolidated accounts.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

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 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 or liabilities of joint ventures 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 provision.

The amounts included in the consolidated financial statements in respect of post acquisition results of joint ventures are taken from their latest financial statements made up to the Group's balance sheet date.

In the Parent financial statements, investments in joint ventures are carried at cost less any impairment charges.

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 in which the Group has a participating interest, 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.

3. NEW STANDARDS AND INTERPRETATIONS
A number of new standards, amendments to standards and interpretations are not yet effective for the year ended 31 December 2016, and have not been applied in preparing these consolidated financial statements. The items that may have relevance to the Group are as follows:

New / Revised International Financial Reporting Standards	Effective date ¹
Amendments to IAS 7: Disclosure Initiative	1 January 2017*
Amendments to IAS 12: Recognition of Deferred Tax Assets for Unrealised Losses	1 January 2017*
IFRS 15: Revenue from Contracts with Customers	1 January 2018*
IFRS 9: Financial Instruments	1 January 2018*
IFRS 16: Leases	1 January 2019*

¹ The effective dates are those applying to EU endorsed IFRS if later than the IASB effective dates and relate to periods beginning on or after those dates detailed above.
* These are the IASB effective dates not yet endorsed under EU IFRS.

Standards, interpretations and amendments to published standards that are not yet effective
The Group has not applied certain standards, amendments and interpretations to existing standards that have been issued but are not yet effective. The most significant of which are as follows:

IFRS 9: Financial Instruments (effective date: ESB financial year beginning 1 January 2018)
This standard is designed to replace IAS 39 Financial Instruments: Recognition and Measurement and has been completed in a number of phases with the final version issued by the IASB in July 2014. The Standard includes requirements for recognition, measurement, impairment and de-recognition of financial instruments and general hedge accounting. Subject to EU endorsement, the Group will apply IFRS 9 from its effective date. The Group is currently assessing the impact of IFRS 9 on the Group's financial statements.

IFRS 15: Revenue from Contracts with Customers (effective date: ESB financial year beginning 1 January 2018)
This standard will replace IAS 18: Revenue, IAS 11: Construction Contracts and related interpretations. The standard deals with revenue recognition and establishes principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers. Revenue is recognised when a customer obtains control of a good or service and therefore has the ability to direct the use and obtain the benefits from the good or service. Subject to EU endorsement, the Group will apply IFRS 15 from its effective date. The Group is currently assessing the impact of IFRS 15 on the Group's financial statements.

IFRS 16: Leases (effective date: ESB financial year beginning 1 January 2019)
This standard will replace IAS 17: Leases. The changes under IFRS 16 are significant and will predominantly affect lessees, the accounting for which is substantially reformed. The lessor accounting requirements contained in IFRS 16's predecessor, IAS 17 will remain largely unchanged. The main impact on lessees is that almost all leases will be recognised in the balance sheet as the distinction between operating and finance leases is removed for lessees. Instead, under IFRS 16, an asset (the right to use the leased item) and a financial liability to pay rentals are recognised. The only exemptions are short-term and low-value leases. The standard introduces new estimates and judgemental thresholds that affect the identification, classification and measurement of lease transactions. More extensive disclosures, both qualitative and quantitative, are also required. Subject to EU endorsement, the Group will apply IFRS 16 from its effective date. The Group is currently assessing the impact of IFRS 16 on the Group's financial statements. Other changes to IFRS have been issued but are not yet effective for the Group. However, they are either not expected to have a material effect on the consolidated financial statements or they are not currently relevant for the Group.

4. FOREIGN CURRENCIES
These financial statements are prepared in euro, which is the Parent's functional currency.

Foreign currency transactions
Transactions in foreign currencies are recorded at the rate ruling at the date of the transactions. The resulting monetary assets and liabilities are translated at the rate ruling at the balance sheet date and the exchange differences are dealt with in the income statement. Non-monetary assets and liabilities are carried at historical cost and not subsequently retranslated.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

Net investments in foreign operations
Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured accordingly in that currency. In the consolidated financial statements, the Group's net investments in overseas subsidiary undertakings, joint ventures, associates and related goodwill are translated at the rate ruling at the balance sheet date. Where an intergroup loan is made for the long-term and its settlement is neither planned nor foreseen, it is accounted for as part of the net investment in a foreign operation. The profits, losses and cash flows of overseas subsidiary undertakings, joint ventures and associates are translated at average rates for the period where that represents a reasonable approximation of the actual rates.

Exchange differences resulting from the retranslation of the opening balance sheets of overseas subsidiary undertakings, joint ventures and associates at closing rates, together with the differences on the translation of the income statements, are dealt with through a separate component of equity (translation reserve) and reflected in the Group statement of comprehensive income. Translation differences held in this reserve are released to the income statement on disposal of the relevant entity.

Where foreign currency denominated borrowings are designated as a hedge of the net investment in a foreign operation, exchange differences on such borrowings are taken to the same translation reserve to the extent that they are effective hedges.

5. 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.

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.

Major asset classifications and their allotted life spans are:

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

Depreciation is provided on all depreciable assets from the date of commissioning (date available for use), as follows:
■ On the straight-line method for transmission, distribution and general assets, and
■ On a projected plant usage basis for generating units.

Reviews of depreciation rates and residual values are conducted annually.

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 Company and the cost of the item can be measured reliably. All other repairs and maintenance 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.

6. LEASED ASSETS
Finance leases are leases where the Group, as lessee, assumes substantially all the risks and rewards of ownership, while operating leases are those in which the lessor retains those risks and rewards of ownership.

Non-current assets acquired under finance leases are included in the balance sheet at their equivalent capital value and are depreciated over the shorter of the lease term and their expected useful lives. The corresponding liabilities are recorded as a finance lease payable and the interest element of the finance lease payments is charged to the income statement on a constant periodic rate of interest. Operating lease rentals are charged to the income statement on a straight-line basis over the lease term.

7. INTANGIBLE ASSETS AND GOODWILL (a) Goodwill
Goodwill that arises on the acquisition of subsidiaries is presented separately on the balance sheet. For the measurement of goodwill at initial recognition, see note 12 to the financial statements.

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.

(b) Emissions allowances
Emissions allowances purchased by ESB are recorded as intangible assets at market value on the date of issue.

As emissions arise, a charge is recorded in the income statement to reflect the amount required to settle the liability to the Authority. This provision includes the carrying value of the emissions 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, in order to cover the liability for actual emissions of CO₂ during that year. Emissions allowances held at cost as intangible assets are therefore not amortised as they are held for settlement of the emissions liability 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 costs 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	20 years

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

Costs that are directly associated with the production of identifiable and unique software products controlled by the Group and the Parent, and that will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets. Direct costs include the costs of software development, employees and an appropriate portion of relevant overheads. These costs 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.

8. IMPAIRMENT OF 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. 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 an external view 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.

9. 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. All other borrowing costs are recognised in the income statement in the period in which they are incurred. The capitalisation rate applied equates to the average cost of ESB's outstanding debt and where applicable, a project specific rate is applied.

10. 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.

11. FINANCIAL ASSETS AND LIABILITIES

(a) Non-derivative financial assets and liabilities

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 provision made for impairment.

Specific provisions are made where there is objective evidence of impairment, for example where there is an inability to pay. An additional provision is made on a portfolio basis to cover additional incurred losses based on an analysis of previous loss experience updated for current market conditions.

Cash and cash equivalents

For the purpose of the cash flow statement, 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, less bank overdrafts payable on demand.

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.

Loans to and receivables from Group Companies

Loans to and receivables from Group Companies are non-derivative financial assets which are not quoted in an active market. They are included in current assets 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. Loans and receivables are included within trade and other receivables in the Parent balance sheet and are initially recorded at fair value and thereafter at amortised cost.

Financial assets or liabilities at fair value through profit or loss

Financial instruments classified as assets or liabilities at fair value through the income statement are financial instruments either held for trading or designated at fair value through profit or loss at inception.

On initial recognition, these assets are recognised at fair value, with transaction costs being recognised in profit or loss, and are subsequently measured at fair value. Gains and losses on these financial assets are recognised in profit or loss as they arise.

Instruments held for trading are those that are acquired principally for the purpose of sale in the near term, are part of a portfolio of investments which are managed together and where short-term profit taking occurs.

(b) Derivative financial instruments and other hedging instruments

The Group uses derivative financial instruments and non-derivative financial instruments to hedge its exposure to foreign exchange, interest rate, and commodity price risk arising from operational, financing and investing activities. The principal derivatives used include interest rate swaps, inflation-linked interest rate swaps, currency swaps, forward foreign currency contracts and indexed swap contracts relating to the purchase of fuel.

Within its regular course of business, the Group routinely enters into sale and purchase derivative 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 IAS 39 Financial Instruments: Recognition and Measurement.

Derivative 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. Where a hedge accounting relationship is designated and is proven to be effective, the changes in fair value will be recognised in accordance with IAS 39 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. The majority of these 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 and procedures are applied to ensure the derivative is highly effective in achieving its objective and that the effectiveness of the hedge can be reliably measured. 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.

Derivatives that are not part of effective hedging relationships are treated as if held for trading, with all fair value movements being recorded through the income statement.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

(i) 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 ineffective part of any gain or loss 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.

(ii) 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 immediately in the income statement.

(c) 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.

(d) Insurance contracts

During the normal course of business, Parent Company guarantees and bonds are provided to subsidiary companies of the Parent. These guarantees and bonds are classified under IFRS 4 as insurance contracts. Where it is expected that no claims will be made on these contracts, no provision is made in the Parent Company financial statements. Where claims are probable, the provisions policy (15) is applied.

12. NON-REPAYABLE SUPPLY CONTRIBUTIONS AND CAPITAL GRANTS

Non-repayable supply contributions and capital grants received up until 1 July 2009 were recorded as deferred income and are released to the income statement on a basis consistent

with the depreciation policy of the relevant assets.

Following the implementation of IFRIC 18 Transfer of Assets from Customers, non-repayable supply contributions received after 1 July 2009 (the effective date of the interpretation) are recognised in full upon completion of services rendered, in the income statement.

13. CAPITAL STOCK

The units of capital stock are measured at the price at which they were initially issued to the Department of Finance, the Department of Communications, Climate Action and Environment and the ESB ESOP Trustee Limited.

14. 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 lines on the face of the income statement for profits from joint ventures.

(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.

15. 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 generating station closure

The provision for closure of generating stations represents the present value of the current estimate of the costs of closure of the stations at the end of their useful lives.

The estimated costs of closing stations are recognised in full at the outset of the asset life, but discounted to present values using a risk free rate. The costs are capitalised in property, plant and equipment and are depreciated over the useful economic lives of the stations to which they relate. 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 the relevant assets. 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. The actual expenditure is set against the provision as stations are closed.

The provision for generating station closure costs is included within current or non-current provisions as appropriate on the balance sheet.

16. OPERATING SEGMENTS – IFRS 8

As a result of the €3 billion wholesale Eurobond debt programme, which is listed on the Irish Stock Exchange, the disclosure requirements of IFRS 8 Operating Segments apply 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 2 to the financial statements.

17. REVENUE

(a) Electricity revenue

Revenue comprises the sales value derived from the generation, distribution and sale of electricity, together with other goods and services to customers outside the Group and excludes value added tax.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

Electricity revenue includes the value of units supplied to customers between the date of the last meter reading and the year end and this estimate is included in trade and other receivables in the balance sheet as unbilled consumption. Electricity revenue is recognised on consumption of electricity.

(b) Contract revenue

Contract revenue is recognised on a time apportionment basis by reference to the stage of completion of the contract at the balance sheet date.

18. OTHER OPERATING INCOME

Other operating income comprises of income which accrues to the Group outside of the Group's normal trading activities.

19. COSTS

(a) 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 the market under the Public Service Obligation (PSO) levy.

(b) 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.

(c) Finance income and finance costs

Finance income comprises interest income on bank deposits, which attract interest at prevailing deposit interest rates.

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, losses on hedging instruments that are recognised in the income statement and reclassifications of amounts previously recognised in other comprehensive income.

20. 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 4 of the financial statements.

21. EMPLOYEE RELATED LIABILITIES (a) Restructuring liabilities

Voluntary termination benefits are payable under various collective agreements between the Board of ESB and Union Staff 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.

Termination benefits for voluntary redundancies are recognised as an expense when the Group has made an offer of voluntary redundancy and the offer has been accepted. Ordinary termination benefits not covered by the aforementioned agreement are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises costs for a restructuring. 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 vacation leave and bonuses accrued are recognised when employees render the service that increases their entitlement to future compensated absences.

22. 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 the majority of employees in the electricity business are funded through a contributory pension scheme called the ESB Defined Benefit Pension Scheme. The fund is vested in Trustees nominated by ESB and its members for the sole benefit of employees and their dependants. The Scheme is registered as a Defined Benefit Scheme with the Pensions Authority.

The regulations governing the Scheme stipulate the benefits that are to be provided and the contributions to be paid by both ESB and the contributing members. Benefits payable are determined by reference to a Career Average

Revalued Earnings (CARE) pension model for benefits earned after 1 January 2012 (previously based on final salary). ESB has no legal obligation to increase contributions to maintain benefits in the event of a deficit and ESB's rate of contribution cannot be altered without the agreement of ESB and approval of the Minister for Communications, Climate Action and Environment. Should a deficit arise in the future, the Company is obliged under the Scheme regulations to consult with the Superannuation Committee, the Trustees and the Scheme Actuary to consider the necessity of submitting an amending Scheme for Ministerial approval.

Under the 2010 Pensions Agreement (approved by employees in July 2010 and formally ratified by the Board of ESB on 20 October 2010), ESB agreed to a once off cash injection into the Scheme, payable over a number of years, which had an agreed valuation for actuarial purposes as at 1 January 2010 of €591 million. The fixed contribution rates for the employer and for employees were not changed. Under the Agreement membership of the Scheme has been closed to new joiners.

The obligations to the Scheme reflected in ESB's financial statements have been determined in accordance with IAS 19 Employee Benefits. Given that the Scheme is not a typical "balance of costs" DB Scheme (where the employer is liable to pay the balance of contributions required to fund benefits), the obligations to be reflected in the financial statements require the exercise of judgement. Should a deficit arise in the future, the Company, as noted above, is obliged to consult with the parties to the Scheme. However, ESB has no obligation to increase contributions to maintain benefits in the event of a deficit and the Company does not intend that any further contributions, other than the normal on-going contributions and the balance of the Company's €591 million additional contribution (committed to as part of the 2010 Pensions Agreement), will be made. Therefore, ESB has concluded that the financial statements should reflect its obligations to the Scheme, which consist of:

- any remaining amounts to be paid in relation to the once-off contribution agreed pursuant to the 2010 Agreement (€591 million in 2010 money to be paid over a number of years);
- pre-existing commitments relating to past service (the present value of the agreed contributions that relates to service prior to October 2010), and
- 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.

NOTES TO THE FINANCIAL STATEMENTS

1. STATEMENT OF ACCOUNTING POLICIES (continued)

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.

Pension scheme in Northern Ireland

The Group's wholly owned subsidiary undertaking Northern Ireland Electricity Networks Limited (NIE Networks) operates a defined benefit scheme in respect of all eligible employees. 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.

NOTES TO THE FINANCIAL STATEMENTS

2. SEGMENT REPORTING

As a result of issuing publicly traded debt, the Group comes within the scope of 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 the Executive Team 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) Electric Ireland is a leading supplier of electricity and gas to domestic customers in the Republic of Ireland and during 2015 entered the Northern Ireland domestic market. Electric Ireland has a substantial market share in the non-domestic sector in both the Republic of Ireland and Northern Ireland. Revenues are primarily derived from sales to electricity 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 the Republic of Ireland. ESB Networks is a regulated business earning an allowed return on its Regulated Asset Base (RAB) through Use of System Charges payable by electricity generators and suppliers. It is ring-fenced through regulation through the Group's generation and supply business.

(c) Generation and Wholesale Markets comprises the generation and international investment business across the Group. Within this business segment, the Group operates power stations and wind farms in the Republic of Ireland, Northern Ireland and Great Britain.

(d) Northern Ireland Electricity Networks (NIE Networks) is principally concerned with the ownership and operation of the electricity distribution network and the ownership of the electricity transmission network in Northern Ireland. NIE Networks derives its revenue principally from charges for the use of the distribution systems levied on electricity suppliers and from charges on 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 in place 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 are not recharged to other operating segments.

A separate business unit, Innovation was established to co-ordinate and focus on new investment opportunities to develop and grow business in the context of a changing environment. This segment operates adjacent to the core operating segments of the Group. It is proposed that as business opportunities are identified and become viable, they will then be transferred to the relevant core operating segment. Innovation is reported to the CODM as a separate component within Other 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. Electric Ireland revenues consist of sales to electricity and gas customers. Generation and Wholesale Markets revenue derives mainly from electricity generation. ESB Networks and NIE Networks earn Use of System income in the Republic of Ireland and Northern Ireland respectively. Revenue included within Other Segments relates primarily to engineering services.

NOTES TO THE FINANCIAL STATEMENTS

2. SEGMENT REPORTING (continued)

(a) Income statement

(i) Segment revenue - 2016

	Electric Ireland € '000	ESB Networks € '000	Generation and Wholesale Markets € '000	NIE Networks ¹ € '000	Other Segments € '000	Consolidation and eliminations € '000	Total € '000
External revenues	1,890,601	474,103	521,055	256,935	69,057	-	3,211,751
Inter-segment revenue	4,392	544,818	806,290	15,345	209,266	(1,580,111)	-
Revenue	1,894,993	1,018,921	1,327,345	272,280	278,323	(1,580,111)	3,211,751

(ii) Segment operating costs - 2016

Depreciation and amortisation	(9,009)	(379,747)	(202,218)	(141,409)	(28,026)	-	(760,409)
Other operating costs	(1,813,606)	(357,544)	(896,882)	(95,573)	(306,046)	1,580,111	(1,889,540)

(iii) Operating result - 2016

Operating profit / (loss)	72,378	314,216	230,836	35,298	(55,402)	-	597,326
Net finance cost	(136)	(289)	(9,726)	(50,255)	(328,018)	-	(388,424)
Share of equity accounted investees profit / (loss)	-	-	91	-	(15,348)	-	(15,257)
Profit / (loss) before taxation	72,242	313,927	221,201	(14,957)	(398,768)	-	193,645

(i) Segment revenue - 2015

	Electric Ireland € '000	ESB Networks € '000	Generation and Wholesale Markets € '000	NIE Networks ¹ € '000	Other Segments € '000	Consolidation and eliminations € '000	Total € '000
External revenues	2,095,907	407,880	472,241	279,630	79,743	-	3,335,401
Inter-segment revenue	4,418	546,172	936,479	21,672	198,558	(1,707,299)	-
Revenue	2,100,325	954,052	1,408,720	301,302	278,301	(1,707,299)	3,335,401

(ii) Segment operating costs - 2015

Depreciation and amortisation	(8,288)	(365,361)	(206,227)	(147,697)	(17,105)	-	(744,678)
Other operating costs	(2,047,985)	(335,015)	(961,122)	(105,336)	(242,140)	1,707,299	(1,984,299)
Impairment charge (exceptional item)	-	-	(104,237)	-	-	-	(104,237)

(iii) Operating result - 2015

Operating profit (includes exceptional item)	44,052	286,644	137,079	48,269	15,086	-	531,130
Net finance cost	(149)	(665)	(29,528)	(57,557)	(127,189)	-	(215,088)
Share of equity accounted investees loss	-	-	(179)	-	(8,997)	-	(9,176)
Profit / (loss) before taxation	43,903	285,979	107,372	(9,288)	(121,100)	-	306,866

¹ NIE Networks segment includes depreciation on fair value uplift recognised in the acquisition of NIE Networks.

NOTES TO THE FINANCIAL STATEMENTS

2. SEGMENT REPORTING (continued)

(b) Other disclosures	2016 € '000	2015 € '000
Additions to non-current assets (excluding acquisitions)		
Electric Ireland	7,569	10,895
ESB Networks	373,260	494,477
Generation and Wholesale Markets	262,403	175,965
NIE Networks	141,230	134,977
Other Segments	113,153	56,659
Total	897,615	872,973

Additions to non-current assets (excluding acquisitions) includes investments in property, plant and equipment, intangible assets (excluding emissions allowances) and financial assets.

3. GEOGRAPHIC INFORMATION

(a) Non-current assets by geographic location	2016 € '000	2015 € '000
Ireland	7,812,557	7,767,937
UK including Northern Ireland	3,273,549	3,717,022
Rest of world	10,406	24,566
Total	11,096,512	11,509,525

Non-current assets for this purpose consist of property, plant and equipment, intangible assets, goodwill, investments in equity accounted investees, financial asset investments and trade and other receivables. Derivative financial instruments and deferred tax assets are excluded.

(b) External revenue by geographic market	2016 € '000	2015 € '000
Ireland	2,744,816	2,792,331
UK including Northern Ireland	449,251	528,051
Rest of world	17,684	15,019
Total	3,211,751	3,335,401

4. EXCEPTIONAL ITEMS

The Group presents certain items separately which are unusual by virtue of their size and incidence in the context of its ongoing core operations. This presentation is made in the income statement to aid understanding of the performance of the Group's underlying business. Judgement is used by the Group in assessing the particular items which should be disclosed as exceptional.

	2016 € '000	2015 € '000
Impairment charges	-	(104,237)

Impairment charges

International Accounting Standard 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. Following impairment reviews for year ended 31 December 2016, there are no impairment charges of an exceptional nature.

In 2015, there were two plants subject to impairment charges:

Corby is a 350 MW Combined Cycle Gas Turbine (CCGT) in Great Britain (GB). In 2015, an impairment charge of €57.8 million (Stg£41.0 million) was recorded in operating costs (note 6) in respect of Corby due to adverse changes to the projected GB wholesale electricity price curve and Corby being unsuccessful in the 2015 GB capacity auction at that time.

Coolkeeragh is a 400 MW CCGT in Northern Ireland (NI). Coolkeeragh provides system security in NI but despite this, in 2015, the plant experienced a reduction in its running in the Single Electricity Market (SEM). The reduction is due to energy generated from other technologies being more economic and also there are a number of gas plants, similar to Coolkeeragh, in the SEM competing for running. As a result of this reduced running, an impairment review was performed which resulted in an impairment charge of €46.4 million (Stg£33.0 million) being recognised in 2015.

NOTES TO THE FINANCIAL STATEMENTS

5. OTHER OPERATING INCOME / (EXPENSES)

	2016 € '000	2015 € '000
Profit on disposal of property, plant and equipment and intangible assets	926	590
Profit on disposal of subsidiaries ¹	9,383	6,852
Amortisation of supply contributions	33,138	32,222
Dividends received	1,139	-
Fair value movements on assets measured at fair value through profit and loss (note 13) ²	(9,062)	(2,847)
Loss on conversion of Geothermal International Limited to subsidiary ³	-	(7,874)
Total	35,524	28,943

¹ The profit on disposal of subsidiaries relates to the sale of wind farms in Airvolution of which €21.1 million (2015: €26.1 million) was included in property, plant and equipment (note 10).

² The fair value movements in 2016 and 2015 relate to adjustments to the value of investments in renewable enterprises held by Novusmodus, as detailed in note 13.

³ Refer to note 13 for further information relating to the conversion of Geothermal International Limited to subsidiary.

6. OPERATING COSTS

	2016 € '000	2015 € '000
Employee costs (note 8) ¹	463,750	439,282
Fuel costs ²	596,367	653,667
Other electricity related costs	303,818	434,732
Operations and maintenance ^{1 & 3}	520,635	456,618
Impairment charges (note 10)	4,970	104,237
Depreciation and amortisation (notes 10 / 11)	760,409	744,678
Total	2,649,949	2,833,214

¹ The prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications of €18.1 million had no effect on the reported results of operations. There has been a change in the presentation of reported operating and maintenance costs and employee costs in the Group's subsidiary, NIE Networks.

² Included in fuel costs is a charge of €1.5 million (2015: €nil) relating to the fair value movement of fuel commodity swaps which have not been designated as accounting hedges.

³ Included in operations and maintenance is a foreign exchange retranslation loss of €26 million (2015: €10 million gain) on sterling denominated intercompany positions.

NOTES TO THE FINANCIAL STATEMENTS

7. NET FINANCE COST AND OTHER FINANCING CHARGES

	2016 € '000	2015 € '000
Interest payable on borrowings	219,722	259,583
Less capitalised interest	(49,235)	(52,626)
Net interest on borrowings	170,487	206,957
Financing charges:		
- on NIE Networks pension scheme (note 21)	4,312	5,651
- on ESB pension scheme (note 22)	29,657	30,788
- on employee related liabilities (note 22)	835	1,190
- on power station closure costs (note 25)	1,482	1,568
- on other provisions (note 25)	537	462
Total financing charges	36,823	39,659
Fair value losses / (gains) on financial instruments:		
- currency / interest rate swaps: cash flow hedges, transfer from OCI	6,274	7,722
- interest rate swaps and inflation linked swaps not qualifying for hedge accounting	183,863	(37,958)
- foreign exchange contracts not qualifying for hedge accounting	25	2
Total fair value losses / (gains) on financial instruments	190,162	(30,234)
Finance cost	397,472	216,382
Finance income	(9,048)	(1,294)
Net finance cost	388,424	215,088

The financing charges on provisions are calculated in accordance with the policy for discounting of future payment obligations as disclosed in the accounting policies - see note 1.

In addition to the amounts transferred from other comprehensive income relating to interest rate swaps and foreign exchange contracts disclosed above, a further €10.4 million (2015: €63.7 million) has been transferred from the cash flow hedge reserve to net finance cost and other financing charges during the year. However, these amounts are fully offset by movements in the translation of the underlying hedged foreign currency borrowings at the prevailing exchange rates.

Included in finance income is interest on borrowings receivable from Tilbury Green Power Holdings Limited €8.4 million (2015: €nil) - see note 28 for further details.

Negative fair value movements of €187.6 million arose on the inflation linked swaps in 2016 (2015: positive fair value movements of €29.8 million) reflecting the current low interest rate environment and higher RPI index in the UK. These have been recognised within finance costs in the income statement, as hedge accounting is not available for these instruments.

NOTES TO THE FINANCIAL STATEMENTS

8. EMPLOYEES

GROUP		
(a) Average number of employees in year by business activity, including temporary employees:	2016 Number	2015 Number
Electric Ireland	365	346
ESB Networks	3,289	3,204
Generation and Wholesale Markets	981	973
NIE Networks	1,261	1,208
Other Segments	1,701	1,574
Total	7,597	7,305
(b) Employee costs in year	2016 € '000	2015 € '000
Current staff costs (excluding pension)¹		
Salaries	507,776	471,418
Overtime	35,360	38,713
Social welfare costs (PRSI)	34,576	34,200
Other payroll benefits ²	34,140	32,203
	611,852	576,534
Capitalised payroll	(201,513)	(191,652)
Net payroll cost for employees	410,339	384,882
(c) Pension and other employee benefit costs		
Pensions charge – other schemes ³	45,374	44,127
NIE Networks pension scheme charge ⁴	8,037	10,273
	53,411	54,400
Total employee related costs charged to the income statement	463,750	439,282

¹ The prior year amounts have been reclassified for consistency with the current year presentation. These reclassifications of €18.1 million had no effect on the reported results of operations. There has been a change in the presentation of reported operating and maintenance costs and employee costs in the Group's subsidiary, NIE Networks.

² These benefits primarily include travel and subsistence expenses and accruals for holiday leave balances remaining at year end.

³ The pension charge to other schemes include contributions to the ESB Defined Contribution Pension Scheme, ESB Defined Benefit Pension Scheme and the Options section of the NIE Networks Scheme.

⁴ The NIE Networks pension scheme charge relates solely to the Focus section of the Northern Ireland Electricity Scheme (the NIE Networks Scheme). See note 21 for further details.

NOTES TO THE FINANCIAL STATEMENTS

8. EMPLOYEES (continued)

PARENT		
(a) Average number of employees in year by business activity, including temporary employees:	2016 Number	2015 Number
Electric Ireland	286	283
ESB Networks	3,289	3,204
Generation and Wholesale Markets	619	626
Other Segments	940	850
Total	5,134	4,963
(b) Employee costs in year	2016 € '000	2015 € '000
Current staff costs (excluding pension)		
Salaries	362,075	321,526
Overtime	26,948	29,808
Social welfare costs (PRSI)	22,367	20,722
Other payroll benefits ¹	22,216	20,933
	433,606	392,989
Capitalised payroll	(143,959)	(134,146)
Net payroll cost for employees	289,647	258,843
(c) Pension and other employee benefit costs		
Pension Charge ²	32,334	31,697
Total employee related costs charged to the income statement	321,981	290,540

¹ These benefits primarily include travel and subsistence expenses and accruals for holiday leave balances remaining at year end.

² The pension charge to other schemes include contributions to the ESB Defined Contribution Pension Scheme and the ESB Defined Benefit Pension Scheme.

9. PROFIT FOR THE FINANCIAL YEAR

	2016 € '000	2015 € '000
The profit for the financial year is stated after charging / (crediting):		
Depreciation and amortisation	760,409	744,678
Impairment charge ¹	4,970	104,237
Operating lease charges	18,596	13,940
Amortisation of supply contributions ²	(33,138)	(32,222)
Profit on disposal of property, plant and equipment	(926)	(590)
Profit on disposal of subsidiaries and intangible assets	(9,383)	(6,852)
Loss on conversion of Geothermal International Limited to subsidiary	-	7,874
Auditor's remuneration:		
- Audit of individual and Group financial statements ³	320	320
- Other assurance services	315	290
- Tax advisory services (Parent and NIE Networks entities only)	9	36
- Other non-audit services	156	67
ESB (Parent) Board Members' remuneration:		
- Fees	155	142
- Other remuneration	359	359

¹ Impairment charge (note 10)

² Included within note 24 deferred income and government grants is amortisation of supply contributions €33.1 million (2015: €32.2 million) and other deferred income €25.4 million (2015: €25.3 million)

³ €180,000 (2015: €180,000) related to the Parent Company

NOTES TO THE FINANCIAL STATEMENTS

10. PROPERTY, PLANT & EQUIPMENT

GROUP	Land and buildings € '000	Plant and machinery € '000	Total assets in commission € '000	Assets under construction € '000	Total € '000
Cost					
Balance at 1 January 2015	1,180,201	16,033,296	17,213,497	1,572,404	18,785,901
Additions	100	235,367	235,467	579,058	814,525
Retirements / disposals	(1,299)	(12,329)	(13,628)	(26,164)	(39,792)
Transfers out of assets under construction	21,865	429,977	451,842	(451,842)	-
Transfers to intangible assets	-	-	-	(31,604)	(31,604)
Translation difference	552	258,393	258,945	40,258	299,203
Balance at 31 December 2015	1,201,419	16,944,704	18,146,123	1,682,110	19,828,233
Balance at 1 January 2016	1,201,419	16,944,704	18,146,123	1,682,110	19,828,233
Additions	57,565	203,578	261,143	585,647	846,790
Retirements / disposals	(3,307)	(12,218)	(15,525)	(21,127)	(36,652)
Transfers out of assets under construction	27,368	981,619	1,008,987	(1,008,987)	-
Transfers to intangible assets	-	-	-	(28,022)	(28,022)
Translation difference	(1,366)	(659,816)	(661,182)	(115,077)	(776,259)
Balance at 31 December 2016	1,281,679	17,457,867	18,739,546	1,094,544	19,834,090
Depreciation					
Balance at 1 January 2015	660,244	7,409,071	8,069,315	-	8,069,315
Charge for the year	21,317	685,050	706,367	-	706,367
Retirements / disposals	(642)	(11,985)	(12,627)	-	(12,627)
Impairment	-	104,237	104,237	-	104,237
Translation difference	126	87,979	88,105	-	88,105
Balance at 31 December 2015	681,045	8,274,352	8,955,397	-	8,955,397
Balance at 1 January 2016	681,045	8,274,352	8,955,397	-	8,955,397
Charge for the year	31,051	686,289	717,340	-	717,340
Retirements / disposals	(1,608)	(11,813)	(13,421)	-	(13,421)
Impairment	-	4,970	4,970	-	4,970
Translation difference	(341)	(268,417)	(268,758)	-	(268,758)
Balance at 31 December 2016	710,147	8,685,381	9,395,528	-	9,395,528
Net book value at 31 December 2016	571,532	8,772,486	9,344,018	1,094,544	10,438,562
Net book value at 31 December 2015	520,374	8,670,352	9,190,726	1,682,110	10,872,836
Net book value at 1 January 2015	519,957	8,624,225	9,144,182	1,572,404	10,716,586

During the year the Group capitalised interest of €49.2 million (2015: €52.6 million) in assets under construction, using an effective interest rate of 4.3% (2015: 4.7%).

The carrying value of non-depreciable assets (land) at 31 December 2016 is €87.4 million (2015: €88.0 million).

Property, plant and equipment with a net book value of €nil at 31 December 2016 is included above at a cost of €3,885.6 million (2015: €3,613.9 million).

Retirements / disposals in both 2016 and 2015 primarily relate to the retirement of assets that have been fully depreciated in addition to the disposal of developmental wind farms from assets under construction (refer to note 5).

Included within additions in 2016 is the capitalisation of an increase in the station closure provision for €56.9 million (2015: €nil). See note 25 for further details.

Impairment 2016

An impairment review has been carried out on assets displaying indications of impairment by comparing the net present value of future cash flows to their net book value as at 31 December 2016. A review of Hunters Hill 20 MW wind farm in Co. Tyrone, Northern Ireland was undertaken at year end. An impairment loss of €4.9 million has been recognised in the income statement in respect of this wind farm. This impairment has arisen as a result of a reduction in load factor.

2015

After a review of the Corby CCGT plant in Great Britain and the Coolkeeragh CCGT plant in Northern Ireland in 2015, an impairment loss of €57.8 million in respect of Corby and €46.4 million in respect of Coolkeeragh was recognised in the income statement in 2015. At 31 December 2016, the remaining carrying value of Corby is €nil (2015: €nil) and Coolkeeragh is €60.0 million (2015: €59.0 million).

Refer to note 4 for further information relating to the above impairment charges in Corby CCGT plant and the Coolkeeragh CCGT plant in 2015.

NOTES TO THE FINANCIAL STATEMENTS

10. PROPERTY, PLANT & EQUIPMENT (continued)

PARENT	Land and buildings € '000	Plant and machinery € '000	Total assets in commission € '000	Assets under construction € '000	Total € '000
Cost					
Balance at 1 January 2015	1,146,335	12,061,530	13,207,865	853,426	14,061,291
Additions	92	98,562	98,654	439,155	537,809
Retirements / disposals	(1,054)	(12,329)	(13,383)	-	(13,383)
Transfers out of assets under construction	21,082	386,664	407,746	(407,746)	-
Transfers to intangible assets	-	-	-	(27,645)	(27,645)
Balance at 31 December 2015	1,166,455	12,534,427	13,700,882	857,190	14,558,072
Balance at 1 January 2016	1,166,455	12,534,427	13,700,882	857,190	14,558,072
Additions	54,165	61,274	115,439	365,789	481,228
Retirements / disposals	(3,324)	(12,122)	(15,446)	-	(15,446)
Transfers out of assets under construction	27,336	222,116	249,452	(249,452)	-
Transfers to intangible assets	-	-	-	(17,133)	(17,133)
Balance at 31 December 2016	1,244,632	12,805,695	14,050,327	956,394	15,006,721
Depreciation					
Balance at 1 January 2015	654,197	6,349,321	7,003,518	-	7,003,518
Charge for the year	17,920	446,844	464,764	-	464,764
Retirements / disposals	(481)	(11,985)	(12,466)	-	(12,466)
Balance at 31 December 2015	671,636	6,784,180	7,455,816	-	7,455,816
Balance at 1 January 2016	671,636	6,784,180	7,455,816	-	7,455,816
Charge for the year	18,634	461,428	480,062	-	480,062
Retirements / disposals	(1,610)	(11,717)	(13,327)	-	(13,327)
Balance at 31 December 2016	688,660	7,233,891	7,922,551	-	7,922,551
Net book value at 31 December 2016	555,972	5,571,804	6,127,776	956,394	7,084,170
Net book value at 31 December 2015	494,819	5,750,247	6,245,066	857,190	7,102,256
Net book value at 1 January 2015	492,138	5,712,209	6,204,347	853,426	7,057,773

During the year the Parent capitalised interest of €29.3 million (2015: €22.2 million) in assets under construction, using an effective interest rate of 4.0% (2015: 4.2%).

The carrying value of non-depreciable assets (land) at 31 December 2016 is €82.4 million (2015: €82.3 million)

Property, plant and equipment with a net book value of €nil at 31 December 2016 are included above at a cost of €3,184.8 million (2015: €2,992.4 million).

Retirements / disposals in both 2016 and 2015 primarily relate to the retirement of assets that have been fully depreciated.

Included within additions in 2016 is the capitalisation of an increase in the station closure provision for €53.5 million (2015: €nil). See note 25 for further details.

NOTES TO THE FINANCIAL STATEMENTS

11. INTANGIBLE ASSETS

GROUP	Software and other intangible assets € '000	Emissions allowances € '000	Software under development € '000	Total € '000
Cost				
Balance at 1 January 2015	581,298	50,023	26,573	657,894
Software additions	12,076	-	33,306	45,382
Purchase of emissions	-	32,153	-	32,153
Software disposals	(332)	-	-	(332)
Settlement of emissions allowances	-	(50,213)	-	(50,213)
Transfers out of software under development	26,153	-	(26,153)	-
Transfers from property, plant and equipment	31,604	-	-	31,604
Translation differences	11,133	-	27	11,160
Balance at 31 December 2015	661,932	31,963	33,753	727,648
Balance at 1 January 2016	661,932	31,963	33,753	727,648
Software additions	4,395	-	36,364	40,759
Purchase of emissions	-	91,614	-	91,614
Software disposals	(2,923)	-	-	(2,923)
Software write off	(859)	-	-	(859)
Settlement of emissions allowances	-	(61,154)	-	(61,154)
Transfers out of software under development	14,024	-	(14,024)	-
Transfers from property, plant and equipment	28,022	-	-	28,022
Translation differences	(28,184)	-	(30)	(28,214)
Balance at 31 December 2016	676,407	62,423	56,063	794,893
Amortisation				
Balance at 1 January 2015	454,234	-	-	454,234
Charge for the year	38,311	-	-	38,311
Retirements / disposals	(56)	-	-	(56)
Translation differences	7,419	-	-	7,419
Balance at 31 December 2015	499,908	-	-	499,908
Balance at 1 January 2016	499,908	-	-	499,908
Charge for the year	43,069	-	-	43,069
Retirements / disposals	(1,020)	-	-	(1,020)
Translation differences	(20,285)	-	-	(20,285)
Balance at 31 December 2016	521,672	-	-	521,672
Net book value at 31 December 2016	154,735	62,423	56,063	273,221
Net book value at 31 December 2015	162,024	31,963	33,753	227,740
Net book value at 1 January 2015	127,064	50,023	26,573	203,660

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 and other wind farm development assets.

Emissions allowances are not amortised as they are held for settlement in the following year.

Amortisation of intangible assets is charged to the income statement as part of operating costs.

NOTES TO THE FINANCIAL STATEMENTS

11. INTANGIBLE ASSETS (continued)

	Software and other intangible assets € '000	Emissions allowances € '000	Software under development € '000	Total € '000
PARENT				
Cost				
Balance at 1 January 2015	414,411	50,105	26,314	490,830
Software additions	8,556	-	30,806	39,362
Purchase of emissions	-	21,402	-	21,402
Software disposals	(567)	-	-	(567)
Settlement of emissions allowances	-	(39,462)	-	(39,462)
Transfers out of software under development	25,879	-	(25,879)	-
Transfers from property, plant and equipment	27,645	-	-	27,645
Balance at 31 December 2015	475,924	32,045	31,241	539,210
Balance at 1 January 2016				
Software additions	3,950	-	30,743	34,693
Purchase of emissions	-	77,447	-	77,447
Software disposals	(2,923)	-	-	(2,923)
Settlement of emissions allowances	-	(46,987)	-	(46,987)
Transfers out of software under development	13,693	-	(13,693)	-
Transfers from property, plant and equipment	17,133	-	-	17,133
Balance at 31 December 2016	507,777	62,505	48,291	618,573
Amortisation				
Balance at 1 January 2015	353,264	-	-	353,264
Charge for the year	26,617	-	-	26,617
Retirements / disposals	(57)	-	-	(57)
Balance at 31 December 2015	379,824	-	-	379,824
Balance at 1 January 2016				
Charge for the year	32,937	-	-	32,937
Retirements / disposals	(1,020)	-	-	(1,020)
Balance at 31 December 2016	411,741	-	-	411,741
Net book value at 31 December 2016	96,036	62,505	48,291	206,832
Net book value at 31 December 2015	96,100	32,045	31,241	159,386
Net book value at 1 January 2015	61,147	50,105	26,314	137,566

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 and other wind farm development assets.

Emissions allowances are not amortised as they are held for settlement in the following year.

Amortisation of intangible assets is charged to the income statement as part of operating costs.

NOTES TO THE FINANCIAL STATEMENTS

12. GOODWILL

	€ '000
Balance at 1 January 2015	194,827
Translation differences	11,932
Balance at 31 December 2015	206,759
Balance at 1 January 2016	206,759
Translation differences	(29,517)
Balance at 31 December 2016	177,242

Goodwill was recognised on the acquisition of NIE Networks in December 2010, and relates to the fair value of the expected return on future investment in the Regulated Asset Base (RAB) of NIE Networks. 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 2016 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 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 pre-tax discount rate of 7.2%.

The discount rate used is a key driver for valuation and the rate was determined by building up an appropriate Weighted Average Cost of Capital (WACC) for the NIE Networks business and benchmarking relevant comparators. Other key drivers include inflation and regulatory assumptions. Inflation rates used were sourced from the UK Office of Budget Responsibility, and a long-term rate of 2.75% was applied. Assumptions in relation to regulatory return are made by reference to previous regulatory decisions in the UK.

Key factors in assessing the value of goodwill are expectations of future levels of capital spend and the appropriateness of the allowed return on the RAB. Both are agreed with the Utility Regulator in Northern Ireland (NIAUR) as part of the Regulatory Price review. Management believes that at the date of the impairment test there were no reasonably possible changes in the key valuation drivers that would cause the carrying amount of the investment to exceed its recoverable amount.

NOTES TO THE FINANCIAL STATEMENTS

13. FINANCIAL ASSET INVESTMENTS

GROUP	Equity accounted investees € '000	Financial assets at fair value through profit or loss € '000	Total € '000
Balance at 1 January 2015	99,464	63,638	163,102
Additions	4,178	8,888	13,066
Transfers to other payables	803	-	803
Share of loss	(9,176)	-	(9,176)
Fair value movement on cash flow hedges	(902)	-	(902)
Fair value movement - transfer to income statement (note 5)	-	(2,847)	(2,847)
Consolidation of equity accounted investee	-	(10,905)	(10,905)
Translation differences	483	3,789	4,272
Balance at 31 December 2015	94,850	62,563	157,413
Balance at 1 January 2016	94,850	62,563	157,413
Additions	3,950	6,116	10,066
Transfers to other payables	1,121	-	1,121
Share of loss	(15,257)	-	(15,257)
Fair value movement on cash flow hedges	(3,258)	-	(3,258)
Fair value movement - transfer to income statement (note 5)	-	(9,062)	(9,062)
Translation differences	(416)	(1,849)	(2,265)
Proceeds received on disposal	-	(1,266)	(1,266)
Balance at 31 December 2016	80,990	56,502	137,492

Equity accounted investees investments

The fair value movement on cash flow hedges for equity accounted investees relates to derivatives held in Raheenleagh Power DAC, Castlepook Power DAC and Tilbury Green Power Holdings Limited which have been designated as cash flow hedging relationships in these entities.

Translation differences for equity accounted investees relate to Tilbury Green Power Holdings Limited as this company's functional currency is sterling.

Name of the company	Country	Holding 31 December 2016 % of share capital owned	Holding 31 December 2015 % of share capital owned
Oweninny Power DAC ¹	Republic of Ireland	50	50
Emerald Bridge Fibres DAC ¹	Republic of Ireland	50	50
SIRO Limited	Republic of Ireland	50	50
Raheenleagh Power DAC	Republic of Ireland	50	50
Kingspan ESB Limited	Great Britain	50	50
Castlepook Power DAC	Republic of Ireland	50	100
Tilbury Green Power Holdings Limited	Great Britain	47	47
Terra Solar Limited	Republic of Ireland	25	-

¹ At 31 December 2016, the investments in Oweninny Power DAC and Emerald Bridge Fibres DAC were held at €nil.

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.

Vodafone's acquisition of shares in SIRO was pursuant to a Joint Venture Arrangement (JVA) concluded between both parties.

SIRO is structured as a separate vehicle, is jointly controlled by the Group and Vodafone Ireland Limited and the Group has a residual interest in the net assets of the company. Accordingly, the Group has classified its interest in SIRO as an equity accounted investee. ESB has committed to provide capital funding to SIRO amounting to €85 million over the next five years.

NOTES TO THE FINANCIAL STATEMENTS

13. FINANCIAL ASSET INVESTMENTS (continued)

Tilbury Green Power Holdings Limited (Tilbury)

The Group is a 47% partner in Tilbury, a joint arrangement formed with Green Investment Bank (47%) and Scandinavian equipment suppliers BWSC and AET (6%). The purpose of this joint arrangement is to construct and operate a waste wood to energy plant in Great Britain.

The amount invested in Tilbury to date amounts to €40.9 million, €2.5 million was advanced as equity and €38.4 million as shareholder loans. Interest on borrowings receivable from Tilbury amount to €8.4 million (note 7).

Tilbury is 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. Accordingly, the Group has classified its interest in Tilbury as an equity accounted investee as both parties have a residual interest in the net assets of the arrangement.

The Group has entered into a 15-year arrangement with Tilbury to purchase physical power, renewable obligation certificates and levy exemption certificates from the plant. Payments made under this contract are contingent upon actual production.

Raheenleagh Power DAC (Raheenleagh)

The Group is a 50% partner in Raheenleagh, a joint arrangement formed with Coillte Teoranta. The purpose of this joint arrangement is to construct and operate a 35 MW wind farm in Co. Wicklow. The amount invested in Raheenleagh to date amounts to €6.9 million of which €3.2 million was advanced as equity and €3.7 million as shareholder loans.

Raheenleagh is 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. Accordingly, the Group has classified its interest in Raheenleagh as an equity accounted investee as both parties have a residual interest in the net assets of the arrangement.

The Group has entered into a 15-year arrangement with Raheenleagh to purchase physical power from the wind farm. Payments made under this contract are contingent upon actual production.

Raheenleagh reached commercial operation in 2016.

Castlepook Power DAC (Castlepook)

The Group held a 100% interest in Castlepook and accounted for it as a fully consolidated subsidiary. During the year ended 31 December 2016, the Group entered a joint arrangement with Coillte Teoranta and a loss of control event occurred for ESB. The purpose of this joint arrangement is to construct and operate a 33.1 MW wind farm in Co. Cork. In 2016, the Group recorded its remaining 50% equity investment at fair value which resulted in no gain or loss in 2016. The Group has classified its interest as an equity accounted investee.

As at 31 December 2016, the Group's share of capital commitments in Castlepook was €18 million and the amount invested in Castlepook as a shareholder loan to date amounts to €6.9 million.

Terra Solar Limited

During the year ended 31 December 2016, the Group invested in Terra Solar Limited, €2.5 million, for a 25% equity shareholding in the company. Terra Solar Limited is a developer of ground mounted solar parks. This investment is classified as an associate and is accounted for using the equity method.

Please refer to note 28 for further information regarding transactions with other equity accounted investees.

NOTES TO THE FINANCIAL STATEMENTS

13. FINANCIAL ASSET INVESTMENTS (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:

	SIRO Limited		Tilbury Green Power Holdings Limited		Other equity accounted investees ¹	
	2016 €'000	2015 €'000	2016 €'000	2015 €'000	2016 €'000	2015 €'000
Summarised income statement						
Revenue	409	20	-	-	-	-
(Loss) / gain	(28,942)	(16,730)	395	-	(2,010)	(1,622)
Total comprehensive (loss) / gain	(28,942)	(16,730)	395	-	(2,010)	(1,622)
Group share of loss	(14,471)	(8,365)	186	-	(972)	(811)
Summarised balance sheet						
	2016 €'000	2015 €'000	2016 €'000	2015 €'000	2016 €'000	2015 €'000
Cash	10,558	71,426	13,744	-	11,694	361
Current assets	4,090	5,549	2,439	95,307	2,332	-
Non-current assets	168,647	129,475	176,362	6,192	81,682	27,033
Current liabilities	(29,133)	(23,345)	(3,202)	-	(413)	(25,712)
Non-current liabilities	-	-	(187,803)	(95,307)	(90,005)	-
Net assets	154,162	183,105	1,540	6,192	5,290	1,682
Reconciliation of the above amounts to the investment recognised in the consolidated statement of financial position.						
Group equity interest	50%	50%	47%	47%	c. 36%	50%
Net assets	154,162	183,105	1,540	6,192	5,290	1,682
Group share	77,081	91,553	724	2,910	1,909	841
Other adjustments	(454)	(454)	-	-	1,730	-
Carrying value of Group's equity interest	76,627	91,099	724	2,910	3,639	841

¹ Other equity accounted investees' includes ESB's 50% share in Emerald Bridge Fibres DAC, Kingspan ESB Limited, Raheenleagh Power DAC, Oweninny Power DAC, Castlepook Power DAC and 25% share in Terra Solar Limited.

Interest in financial assets held at fair value through profit and loss

The Group owns a venture capital fund, Novusmodus, 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. Additions include investments in a number of clean energy and new technology companies and also an investment in the VantagePoint clean energy fund. These investments have been fair valued at the year end and the movement transferred to the income statement. The fair value movements in both 2016 and 2015 primarily relate to adjustments to the value of certain investments in the fund.

At 31 December 2016, the Group could be called upon by its partners in the VantagePoint fund to make a further €0.5 million (2015: €0.4 million) investment in the fund.

Conversion of Geothermal International Limited to a full subsidiary

During 2015, ESB acquired the remaining shareholding of Geothermal International Limited and it therefore became a 100% subsidiary. The carrying value of the Group's investment in Geothermal International Limited at the date of acquisition was €10.9 million and a loss of €7.9 million was recognised in the income statement on conversion to a subsidiary (note 5).

	Equity accounted investee € '000	Subsidiary undertakings € '000
PARENT		
Balance at 1 January 2015	100,000	61,782
Balance at 31 December 2015	100,000	61,782
Balance at 1 January 2016	100,000	61,782
Balance at 31 December 2016	100,000	61,782

NOTES TO THE FINANCIAL STATEMENTS

14. INVENTORIES

	GROUP		PARENT	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000
Materials	31,665	29,489	8,878	8,630
Fuel	41,507	67,181	34,298	58,213
Total	73,172	96,670	43,176	66,843

Inventories consumed during the year ended 31 December 2016 totalled €115.9 million (2015: €123.7 million). There were no inventory impairments recognised during the year (2015: €nil).

15. TRADE AND OTHER RECEIVABLES

	GROUP		PARENT	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000
Current receivables:				
Retail electricity receivables - billed	69,990	89,881	50,728	67,140
Retail electricity receivables - unbilled	182,968	187,853	131,352	140,462
Total retail electricity receivables	252,958	277,734	182,080	207,602
SEM pool related receivables	69,633	54,882	44,181	32,087
Use of System receivables (including unbilled)	238,386	212,527	40,426	38,377
Other electricity receivables	24,030	38,082	3,439	28,316
Total electricity receivables	585,007	583,225	270,126	306,382
Trade receivables - non-electricity	59,428	58,683	11,485	11,024
Amounts due from equity accounted undertakings	4,751	16,218	4,751	-
Other receivables	82,575	56,706	10,762	7,271
Amounts due from subsidiary undertakings	-	-	2,766,885	2,836,676
Prepayments	38,320	36,345	27,972	19,670
Total	770,081	751,177	3,091,981	3,181,023

	GROUP		PARENT	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000
Non-current receivables:				
Trade receivables - non-electricity	196	-	-	-
Amounts due from equity accounted undertakings	69,799	44,777	-	-
Total	69,995	44,777	-	-

Wholesale and retail credit risk

Trade and other receivables can be divided into final retail electricity customers (billed and unbilled), SEM pool related receivables, Use of System receivables, and other (non-electricity) receivables.

The maximum credit exposure of the Group at 31 December 2016 is set out below. Prepayments of €38.3 million (2015: €36.3 million) are excluded from the analysis as no credit exposure is perceived in relation to these. In the case of the Parent, balances stated also exclude amounts due from subsidiary undertakings of €2,766.9 million (2015: €2,836.7 million).

NOTES TO THE FINANCIAL STATEMENTS

15. TRADE AND OTHER RECEIVABLES (continued)

	GROUP 2016			GROUP 2015		
	Gross amount receivable € '000	Impairment provisions € '000	Net amount receivable € '000	Gross amount receivable € '000	Impairment provisions € '000	Net amount receivable € '000
Not past due	732,547	(653)	731,894	662,145	-	662,145
Past due < 30 days	44,780	(1,380)	43,400	57,416	(842)	56,574
Past due 30 - 120 days	15,662	(2,154)	13,508	35,179	(6,785)	28,394
Past due > 120 days	23,918	(16,781)	7,137	24,479	(20,846)	3,633
Past due by more than one year	29,955	(24,138)	5,817	35,927	(27,064)	8,863
Total	846,862	(45,106)	801,756	815,146	(55,537)	759,609

	PARENT 2016			PARENT 2015		
	Gross amount receivable € '000	Impairment provisions € '000	Net amount receivable € '000	Gross amount receivable € '000	Impairment provisions € '000	Net amount receivable € '000
Not past due	251,607	(653)	250,954	269,089	-	269,089
Past due < 30 days	34,668	(702)	33,966	39,324	(670)	38,654
Past due 30 - 120 days	9,547	(1,094)	8,453	18,021	(1,533)	16,488
Past due > 120 days	19,176	(15,985)	3,191	20,569	(20,420)	149
Past due by more than one year	18,286	(17,726)	560	22,919	(22,622)	297
Total	333,284	(36,160)	297,124	369,922	(45,245)	324,677

Management does not expect any significant losses of receivables that have not been provided for as shown above. As explained below overdue amounts, including amounts past due by more than one year, are impaired only to the extent that there is evidence that they are not ultimately recoverable. The impairment provision recognised is collective rather than specific in nature and is calculated based on the level of credit risk perceived in relation to the underlying balances. The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	GROUP		PARENT	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000
Balance at 1 January	55,537	57,865	45,245	51,859
Impairment loss recognised	14,439	22,807	14,706	17,560
Provision utilised	(24,498)	(25,135)	(23,791)	(24,174)
Translation differences	(372)	-	-	-
Balance at 31 December	45,106	55,537	36,160	45,245

Retail electricity receivables

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 Electric Ireland is in relation to retail electricity accounts that have closed in arrears. In addition, given an 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 publication of judgements.

The impairment provisioning policy in relation to retail electricity receivables is based on the historical experience of debts written off. Provision may be made in respect of specific balances where there is evidence of a dispute or an inability to settle. An additional provision is made on a portfolio basis to cover additional anticipated losses based on an analysis of previous losses experienced and an evaluation of the impact of economic conditions and particular industry issues. Provision is not made in cases where appropriate repayment arrangements are in place and there is evidence that balances are ultimately recoverable, notwithstanding that such balances may be seriously in arrears. Collateral is held in the form of security deposits on new customer accounts. The largest single billed retail balance outstanding at 31 December 2016 was €135,000 (2015: €102,000).

Controls around electricity receivables are focused on the full recovery of amounts invoiced. In 2016, electricity receivables to the value of €45.1 million (2015: €55.5 million) were provided for at year end. The single largest customer amount written off during the year was €48,000 (2015: €104,000) relating to a customer that went into liquidation. Retail electricity receivables arise largely in the Republic of Ireland, with 4% (2015: 5%) relating to Northern Ireland revenue.

Unbilled electricity receivables represent estimates of consumption not yet invoiced.

NOTES TO THE FINANCIAL STATEMENTS

15. TRADE AND OTHER RECEIVABLES (continued)

SEM pool receivables

Credit risk in relation to SEM pool related receivables is managed by the Energy Trading and Risk functions (ET&R) within those business units engaged in electricity trading through the SEM pool. 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 SEM revenue streams are governed by the SEM settlement calendar.

Use of System receivables

Use of System income in the Republic of Ireland 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 28 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 business days after month end. Invoices were issued in respect of 166 generators during 2016 for operation and maintenance charges. The credit terms for these invoices are 20 business days.

The credit risk in relation to DUoS is managed by the invocation of section 7 of the DUoS Framework Agreement approved by CER on 1 August 2002. This section provides for the provision of security by each supplier. Before a supplier can register 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 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.

In the event of a supplier defaulting as set out by section 7 of the DUoS Framework agreement, 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 as TAO are governed by 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 2016 was €40.4 million (2015: €41.1 million), which is the largest Use of System receivable balance in the Republic of Ireland.

In respect of the Networks business in Northern Ireland, 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 System Operator for Northern Ireland (SONI). 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 Northern Ireland at 31 December 2016 is €10.4 million (2015: €12.8 million).

Other electricity receivables

Other electricity receivables include amounts in relation to Public Service Obligation (PSO) levy in addition to amounts relating to ancillary services and electricity trading in the UK market which is not included in the 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 single balance included within this category at 31 December 2016 is an amount of €6.0 million (2015: €8.6 million) due from an external company.

16. CASH AND CASH EQUIVALENTS

	GROUP		PARENT	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000
Cash at bank and in hand	363,624	133,863	235,991	17,202

NOTES TO THE FINANCIAL STATEMENTS

17. CHANGES IN EQUITY

(i) Capital stock

There are 1,979,881,855 units of capital stock in issue at a par value of €1 each.

	2016 € '000	2015 € '000
Comprised as:		
Stock issued from converted reserves	1,880,888	1,880,888
Stock issued for subscription by ESOT	98,994	98,994
Total	1,979,882	1,979,882

In accordance with the Electricity (Supply) (Amendment) Act 2001, on 30 December 2001, the equity of ESB was converted to capital stock and 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 to provide that 10% of issued capital stock in ESB now stands vested in the Minister for Communications, Climate Action and Environment, (formerly Minister for Communications, Energy and Natural Resources) with the Minister for Finance retaining 85% of ESB's capital stock and the ESOP retaining 5% of the stock.

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) ESOP repurchase

In May 2015, the ESB Board approved an ESOP market liquidity proposal. The objective of the proposal is to improve liquidity in the Employee Share Ownership Plan (ESOP) market whereby the ESOP Trustee is committing to spend €25.0 million of funds to acquire capital stock in the ESOP internal market. ESB will match the expenditure committed by the ESOP Trustee in the period 2014–2018. Acquisition of the capital stock by ESB will not commence until 2017. An ESOP repurchase provision of €7.0 million was recognised in 2016 (2015: €12.1 million) in relation to the capital stock repurchase by the ESOP Trustee.

(iii) Non-controlling interest - Group

Non-controlling interests at 31 December 2016 relate to the minority shareholdings in Crockahenny Wind Farm DAC, Mountain Lodge Power DAC, Airvolution Energy Limited and wind farms associated with Coriolis Energy.

(iv) Cash flow hedging, revaluation 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 IAS 39, 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.

(v) Other reserves include the following:

- Revaluation reserves of €33.2 million (2015: €38.8 million) which arose following the acquisition of the remaining 30% of Synergen Power Limited in 2009. This reserve is being amortised to retained earnings over the same term as the associated assets acquired and depreciated;
- Non-distributable reserves of (€5.0) million which was created on the sale of the Group's share in Ocean Communications Limited in 2001;
- Actuarial movements on the NIE Networks defined benefit scheme, net of the related deferred tax adjustments, totalling (€228.6) million (2015: (€171.9) million); and
- ESOP repurchase provision of (€19.1) million (2015: (€12.1) million) which relates to the amount that ESB has committed to date to repurchase from the ESOP internal market.

(vi) Dividends

GROUP	2016 € '000	2015 € '000
Dividends on capital stock:		
Total dividend paid 4.37 (2015: 13.77) cents per capital stock unit	86,490	272,334
Dividend to non-controlling interest	-	375
Total	86,490	272,709

NOTES TO THE FINANCIAL STATEMENTS

17. CHANGES IN EQUITY (continued)

(vi) Dividends (continued)

PARENT	2016 € '000	2015 € '000
Dividends on capital stock:		
Total dividend paid 4.37 (2015: 13.77) cents per capital stock unit	86,490	272,334
Total	86,490	272,334

Total dividends paid during 2016 amounted to €86.5 million and include a final dividend of €30.7 million (1.55 cent per unit of stock) in respect of 2015 and an interim dividend, declared and paid, of €55.8 million.

The Board is now recommending that a final dividend of 3.04 cent per unit of capital stock, or €60.1 million in aggregate in accordance with the dividend policy of 38% of profit after tax.

18. TAXATION

(a) Income tax expense

	2016 € '000	2015 € '000
Current tax expense		
Current tax	25,544	45,021
Prior year over provision	(7,472)	(1,735)
Value of tax losses surrendered to joint ventures	168	137
	18,240	43,423
Deferred tax expense		
Origination and reversal of temporary differences	(8,467)	(3,322)
Reduction in tax rate ³	(9,268)	(19,568)
Prior year under provision	6,949	93
	(10,786)	(22,797)
Total	7,454	20,626

	2016 € '000	2015 € '000
Reconciliation of effective tax rate		
Profit before tax	193,645	306,866
Plus: after tax share of joint venture loss	15,257	9,176
Profit before tax (excluding joint venture loss)	208,902	316,042
Taxed at 12.5%	26,113	39,505
Expenses not deductible	6,031	5,209
Deferred tax asset on IDC previously unrecognised ¹	(6,005)	-
Income not taxable ²	(1,656)	-
Income taxed at higher rate of corporation tax	603	49
Higher tax rates on overseas losses	(11,655)	(2,209)
Impact of reduced rate of UK tax on deferred tax stated at Irish tax rate ³	(5,240)	(20,064)
Revisions to prior year estimates	(523)	(1,642)
Other items	(214)	(222)
Income tax expense	7,454	20,626

¹ This relates to a deduction on interest during construction (IDC) in respect of property, plant and equipment previously not recognised.

² This relates to disposals of shares in wind farm companies in the UK that qualified for substantial shareholding relief.

³ The 2016 Budget for the UK included the provision that the UK corporation tax rate will reduce to 17% over a period up to 2020. The reduction in the UK corporation tax rate to 17% (effective 1 April 2020) was substantively enacted on 15 September 2016. This will reduce the Group's future current tax charge accordingly. The deferred tax liability at 31 December 2016 has been calculated based on the rate of 17% (2015: 18%) substantively enacted at the balance sheet date.

NOTES TO THE FINANCIAL STATEMENTS

18. TAXATION (continued)

(b) Deferred tax assets and liabilities

GROUP	2016 € '000	2015 € '000
Deferred tax assets		
Property, plant and equipment and intangible assets	1,703	1,753
Liability - NIE Networks pension scheme	28,904	25,556
Liability - ESB pension scheme	65,601	87,266
Provisions	3,136	3,663
Tax losses forward	9,415	6,151
Derivative financial instruments	91,982	82,857
Total	200,741	207,246
Deferred tax liabilities		
Property, plant and equipment and intangible assets	680,132	731,414
Provisions	796	166
Derivative financial instruments	27,334	18,322
Capital gains tax	1,180	1,180
Total	709,442	751,082
Net deferred tax liability	(508,701)	(543,836)

The movement in temporary differences for the Group were as follows:

2016	Balance at 1 January € '000	Recognised in income € '000	Recognised in OCI € '000	Translation differences € '000	Balance at 31 December € '000
ASSETS					
Property, plant and equipment and intangible assets	1,753	(50)	-	-	1,703
Liability - NIE Networks pension scheme	25,556	(6,491)	9,839	-	28,904
Liability - ESB pension scheme	87,266	(21,665)	-	-	65,601
Provisions	3,663	(527)	-	-	3,136
Tax losses forward	6,151	3,264	-	-	9,415
Derivative financial instruments	82,857	22,658	(1,866)	(11,667)	91,982
Total deferred tax assets	207,246	(2,811)	7,973	(11,667)	200,741
LIABILITIES					
Property, plant and equipment and intangible assets	731,414	(30,846)	-	(20,436)	680,132
Provisions	166	630	-	-	796
Derivative financial instruments	18,322	16,619	9,034	(16,641)	27,334
Capital gains tax	1,180	-	-	-	1,180
Total deferred tax liabilities	751,082	(13,597)	9,034	(37,077)	709,442
Net deferred tax (liability) / asset for the year	(543,836)	10,786	(1,061)	25,410	(508,701)

NOTES TO THE FINANCIAL STATEMENTS

18. TAXATION (continued)

GROUP (continued)

2015	Balance at 1 January € '000	Recognised in income € '000	Recognised in OCI € '000	Translation differences € '000	Balance at 31 December € '000
ASSETS					
Property, plant and equipment and intangible assets	739	1,014	-	-	1,753
Liability - NIE Networks pension scheme	32,802	(582)	(6,664)	-	25,556
Liability - ESB pension scheme	91,384	(4,118)	-	-	87,266
Provisions	4,459	(796)	-	-	3,663
Tax losses forward	8,421	(2,270)	-	-	6,151
Derivative financial instruments	96,569	(17,779)	(1,365)	5,432	82,857
Total deferred tax assets	234,374	(24,531)	(8,029)	5,432	207,246
LIABILITIES					
Property, plant and equipment and intangible assets	760,291	(37,833)	-	8,956	731,414
Provisions	156	10	-	-	166
Derivative financial instruments	29,524	(8,298)	(11,019)	8,115	18,322
Capital gains tax	2,387	(1,207)	-	-	1,180
Total deferred tax liabilities / (assets)	792,358	(47,328)	(11,019)	17,071	751,082
Net deferred tax (liability) / asset for the year	(557,984)	22,797	2,990	(11,639)	(543,836)

There is no expiry date to when tax losses in the Group can be utilised.

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. Nor has deferred tax been provided for in relation to unremitted reserves of the Group's joint ventures as the Group has the ability to control the repatriation of these reserves to Republic of Ireland. Cumulative unremitted reserves of overseas subsidiaries and joint ventures totalled €546.0 million (2015: €508.0 million) as at 31 December 2016.

(ii) PARENT

	2016 € '000	2015 € '000
Deferred tax assets		
Liability - ESB pension scheme	65,602	87,266
Provisions	2,358	2,684
Derivative financial instruments	-	7,635
Total	67,960	97,585
Deferred tax liabilities		
Property, plant and equipment	464,569	457,649
Derivative financial instruments	2,624	-
Capital gains tax	1,180	1,180
Total	468,373	458,829
Net deferred tax liability	(400,413)	(361,244)

NOTES TO THE FINANCIAL STATEMENTS

18. TAXATION (continued)

PARENT (continued)

The movement in temporary differences for the Parent were as follows:

2016	Balance at 1 January € '000	Recognised in income € '000	Recognised in OCI € '000	Balance at 31 December € '000
ASSETS				
Liability - ESB pension scheme	87,267	(21,665)	-	65,602
Provisions	2,684	(326)	-	2,358
Derivative financial instruments	7,635	-	(7,635)	-
Total deferred tax assets	97,586	(21,991)	(7,635)	67,960
LIABILITIES				
Property, plant and equipment	457,649	6,920	-	464,569
Derivative financial instruments	-	-	2,624	2,624
Capital gains tax	1,180	-	-	1,180
Total deferred tax liabilities	458,829	6,920	2,624	468,373
Net deferred tax (liability) / asset for the year	(361,243)	(28,911)	(10,259)	(400,413)
2015	Balance at 1 January € '000	Recognised in income € '000	Recognised in OCI € '000	Balance at 31 December € '000
ASSETS				
Liability - ESB pension scheme	91,384	(4,117)	-	87,267
Provisions	3,184	(500)	-	2,684
Derivative financial instruments	11,064	-	(3,429)	7,635
Total deferred tax assets	105,632	(4,617)	(3,429)	97,586
LIABILITIES				
Property, plant and equipment	445,388	12,261	-	457,649
Capital gains tax	1,180	-	-	1,180
Total deferred tax liabilities	446,568	12,261	-	458,829
Net deferred tax (liability) / asset for the year	(340,936)	(16,878)	(3,429)	(361,243)

NOTES TO THE FINANCIAL STATEMENTS

19. BORROWINGS AND OTHER DEBT

(a) GROUP	Recourse borrowings € '000	Non-recourse borrowings € '000	2016 Total € '000	2015 Total € '000
Current borrowings				
- Repayable by instalments	88,282	28,721	117,003	118,171
- Repayable other than by instalments	338,614	33,713	372,327	300,654
Total current borrowings	426,896	62,434	489,330	418,825
Non-current borrowings				
- Repayable by instalments				
Between one and two years	81,433	18,714	100,147	124,843
Between two and five years	225,576	124,388	349,964	353,292
After five years	421,816	316,743	738,559	772,179
	728,825	459,845	1,188,670	1,250,314
- Repayable other than by instalments				
Between one and two years	95,265	208,165	303,430	339,082
Between two and five years	825,237	-	825,237	1,454,859
After five years	1,611,223	469,553	2,080,776	1,646,059
	2,531,725	677,718	3,209,443	3,440,000
Total non-current borrowings	3,260,550	1,137,563	4,398,113	4,690,314
Total borrowings outstanding	3,687,446	1,199,997	4,887,443	5,109,139

See section (c) for details of applicable interest rates.

Current borrowings by facility		2016 € '000	2015 € '000
Ref			
Long-term bank borrowings	4	386,036	347,067
Private placement borrowings	5	40,860	24,785
Non-recourse long-term project finance debt	2	28,721	18,893
Non-recourse short-term project finance debt (Airvolution)	6	33,713	28,080
		489,330	418,825
Non-current borrowings by facility		2016 € '000	2015 € '000
Ref			
Non-recourse long-term project finance debt	2	459,845	485,041
ESB Eurobonds	1	1,844,868	1,918,096
NIE Networks Eurobonds	3	677,718	791,849
Long-term bank borrowings	4	728,825	765,273
Private placement borrowings	5	686,857	730,055
		4,398,113	4,690,314

With the exception of borrowings relating to non-recourse project finance debt, which is secured against specific assets, none of the borrowings are secured against the Group assets.

At 31 December 2016, ESB was rated A- from Standard & Poor's (outlook stable), BBB+ from Fitch (outlook stable) and Baa1 (equivalent to BBB+) from Moody's (outlook positive).

1. ESB Eurobonds

The table below provides details of ESB Eurobonds included in borrowings at 31 December 2016:

Issuer	Value	Date	Tenor	Coupon
ESB Finance DAC	Stg\$275.0 million	March 2010	10 years	6.500%
ESB Finance DAC	Euro €300.0 million	September 2012	5 years	6.250%
ESB Finance DAC	Euro €215.2 million	November 2012	7 years	4.375%
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%

On 14 June 2016, ESB successfully raised a €600 million, 1.875% fixed rate Eurobond maturing in June 2031. In addition to this, on the same date, the Group successfully bought back a €284.8 million portion of its existing €500 million Eurobond debt which was originally raised in November 2012, as outlined above.

NOTES TO THE FINANCIAL STATEMENTS

19. BORROWINGS AND OTHER DEBT (continued)

1. ESB Eurobonds (continued)

As the terms of the existing bond and the new issue were not substantially different, quantitatively or qualitatively, and the counterparty remained the same under International Accounting Standard 39 - Financial Instruments Recognition and Measurement, this transaction was considered an exchange of existing debt instruments rather than the issue of new debt. As it was an exchange of existing debt instruments the difference between the tendered value of the existing bonds and the par value of the new issue (€43.5 million) was rolled into the effective interest rate of the new bonds. The €43.5 million will be amortised to the income statement over the life of the new bonds. €1.69 million has been amortised to the income statement as at 31 December 2016.

2. Non-recourse long-term project finance debt

In September 2012 Carrington Power Limited, a 100% owned subsidiary of ESB, completed the financial close of an 880 MW combined cycle gas turbine power plant in Carrington, near Manchester. Finance was structured on a 70:30 debt / equity basis, with the debt of Stg£523.0 million being provided by a syndicate of banks by way of non-recourse project finance, incorporating export credit support from the Swiss Export Credit Agency, SERV. Stg£420.1 million (2015: Stg£372.4 million) debt was drawn at the year end. The plant entered commercial operation in September 2016 marking the end of construction. The remainder of this debt is in relation to a wind farm in Great Britain.

3. NIE Networks Eurobonds

As part of the acquisition of NIE Networks, a Eurobond of Stg£175.0 million was also acquired at fair value at the acquisition date. This facility had a 6.875% fixed coupon rate and is repayable in 2018.

In June 2011, NIE Networks Limited issued a Stg£400.0 million 15 year sterling bond with a fixed coupon of 6.375%.

4. Long-term bank borrowings

Long-term bank borrowings include €113.2 million of floating rate debt borrowed on a bilateral basis, while the remainder is fixed interest debt.

A €1.44 billion revolving credit facility with a syndicate of 14 banks to draw down bank finance as required up to January 2022 is available to the Group. This facility is undrawn at 31 December 2016.

The facility signed in December 2013 with the European Investment Bank (EIB) to support renewable connections to the electricity network in the southwest of Ireland was increased by a further €100.0 million in October 2014, bringing the total value of the facility up to €200.0 million dependent on the completion of certain specified capital expenditure. At 31 December 2016, €100.0 million of the EIB facility has been drawn down.

5. Private placement borrowings

The first private placement senior unsecured notes were issued to a range of institutional investors in December 2003. These fixed rate notes were issued in US dollars and sterling and at 31 December 2016, comprise US\$370.0 million, maturing on dates between 2018 and 2023, and Stg£20.0 million, maturing on dates between 2018 and 2023.

The second private placement senior unsecured notes were issued in June 2009. These notes were issued in US dollars, sterling and euro and at 31 December 2016 comprise US\$226.0 million, maturing in 2019, Stg£85.0 million maturing on dates between 2017 and 2021 and €40.0 million maturing in 2019. US\$27.0 million of this second private placement debt was repaid in June 2016 as scheduled. See note 26 (f) for private placement debt swapped to euro at inception.

The private placement debt and certain other facilities have conditions which require ESB to maintain certain interest cover and asset covenants. To date ESB has been fully in compliance with all the covenant requirements associated with the private placement debt and other facilities.

6. Non-recourse short-term project finance debt

Short-term non-recourse project funding of Stg£32.5 million had been drawn down at 31 December 2016. This is in relation to the financing of certain Airvolution projects (a Novusmodus investee).

Hedge of net investment in foreign operations

Included in borrowings above are 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, as outlined below:

Sterling denominated loans designated as a hedge of Group's investment in subsidiary	2016 € '000	2015 € '000
Value at 1 January	64,981	73,477
Repayments in year	(11,892)	(13,123)
(Gain) / loss on translation to euro	(8,526)	4,627
Value at 31 December	44,563	64,981
(Loss) / gain on translation of intra-group euro loan to subsidiary (taken to OCI)	(5,522)	3,265

NOTES TO THE FINANCIAL STATEMENTS

19. BORROWINGS AND OTHER DEBT (continued)

	Recourse borrowings € '000	2016 Total € '000	2015 Total € '000
PARENT			
Current borrowings			
- Repayable by instalments	94,097	94,097	92,823
- Repayable other than by instalments	38,761	38,761	272,574
Total current borrowings	132,858	132,858	365,397
Non-current borrowings			
- Repayable by instalments			
Between one and two years	81,432	81,432	97,538
Between two and five years	225,576	225,576	240,439
After five years	421,816	421,816	427,297
	728,824	728,824	765,274
- Repayable other than by instalments			
Between one and two years	101,080	101,080	45,438
Between two and five years	308,458	308,458	345,195
After five years	271,005	271,005	332,677
	680,543	680,543	723,310
Total non-current borrowings	1,409,367	1,409,367	1,488,584
Total borrowings outstanding	1,542,225	1,542,225	1,853,981

(b) 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 2016 the Group had over €1.7 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 as well as facilities with the EIB. Included in the amount disclosed are facilities totalling €68.0 million (which may be increased to €100.0 million) and can only be drawn against certain specified capital expenditure.

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. All borrowing facilities are in compliance with the Electricity Acts and relevant regulatory requirements.

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	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000
In one year or less	489,330	418,825	132,858	365,397	68,000	-
Between one and two years	403,577	463,925	182,512	142,976	-	145,000
Between two and five years	1,175,201	1,808,151	534,034	585,634	1,440,000	1,190,000
In more than five years	2,819,335	2,418,238	692,821	759,974	-	-
	4,887,443	5,109,139	1,542,225	1,853,981	1,508,000	1,335,000

NOTES TO THE FINANCIAL STATEMENTS

19. BORROWINGS AND OTHER DEBT (continued)

(b) 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 €3,345.2 million (2015: €3,255.5 million) are included in the Group balances below, but do not comprise part of the Parent's liabilities.

	Carrying amount € '000	Contractual cash outflows / (inflows) - net € '000	Within 1 year € '000	1-2 years € '000	2-5 years € '000	More than 5 years € '000
31 December 2016						
Recourse borrowings	3,687,446	4,604,196	578,658	311,442	1,330,971	2,383,125
Non-recourse borrowings	1,199,997	1,585,898	115,081	273,342	240,911	956,564
Total borrowings	4,887,443	6,190,094	693,739	584,784	1,571,882	3,339,689
31 December 2015						
Recourse borrowings	3,785,276	4,694,995	528,860	596,682	1,786,736	1,782,717
Non-recourse borrowings	1,323,863	1,880,859	114,181	95,352	511,393	1,159,933
Total borrowings	5,109,139	6,575,854	643,041	692,034	2,298,129	2,942,650

(c) Interest rate risk management

The Group's interest rate policy was updated in 2016 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 50% 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 2016, 96% of the Group's debt was fixed to maturity or inflation linked (2015: 92%). The fair value of interest rate swaps is disclosed in note 20.

In respect of income-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 € '000	Within 1 year € '000	1-2 years € '000	2-5 years € '000	More than 5 years € '000
Private placement borrowings (fixed interest rate)	6.5	727,717	40,860	103,180	312,657	271,020
Non-recourse borrowings (fixed interest rate)	5.3	1,199,997	62,434	226,879	124,388	786,296
Other long-term borrowings (fixed and variable interest rate)	4.4	2,959,729	386,036	73,518	738,156	1,762,019

Included within other long-term borrowings in this analysis are floating rate liabilities of €113.2 million (2015: €406.0 million).

The effective interest rate on the private placement borrowings has been fixed through the use of cross currency swaps and interest rate swaps. The effective rate of non-recourse sterling borrowings of Stg£470.5 million has been fixed using interest rate swaps. In the absence of these interest rate swaps, the floating rate on the underlying sterling and euro borrowings at 31 December 2016 would be 0.15%, in line with prevailing interest rates in those monetary areas on borrowings of a similar duration. Inflation linked swaps are included at equivalent nominal interest rate levels.

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) at 31 December 2016 would have increased profit before taxation and reduced equity by the amounts shown on the next page. 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.

NOTES TO THE FINANCIAL STATEMENTS

19. BORROWINGS AND OTHER DEBT (continued)

(c) Interest rate risk management (continued)

	31 December 2016		31 December 2015	
	50 bp increase gain / (loss) € '000	50 bp decrease gain / (loss) € '000	50 bp increase gain / (loss) € '000	50 bp decrease gain / (loss) € '000
Profit before taxation				
Interest payable	(566)	566	(2,030)	2,030
Fair value movements on financial instruments	64,808	(62,624)	42,640	(43,244)
Other comprehensive income				
Fair value gains / (losses)	12,680	(12,680)	19,106	(19,106)

The following assumptions were made in respect of the sensitivity analysis above:

- the balance sheet sensitivity to interest rates 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 financial 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.

NOTES TO THE FINANCIAL STATEMENTS

20. 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:

GROUP	2016		Non-current liabilities € '000	Current liabilities € '000	Total € '000
	Non-current assets € '000	Current assets € '000			
Interest rate swaps	15,240	661	(40,533)	(9,127)	(33,759)
Inflation linked interest rate swaps	-	-	(681,981)	(16,491)	(698,472)
Currency swaps	61,289	-	(10,270)	-	51,019
Foreign exchange contracts	9,969	7,715	(619)	(16,185)	880
Forward fuel price contracts	27,042	104,343	(10,236)	(47,633)	73,516
Forward electricity price contracts	70,459	90,473	(10,329)	(10,350)	140,253
	183,999	203,192	(753,968)	(99,786)	(466,563)

	2015		Non-current liabilities € '000	Current liabilities € '000	Total € '000
	Non-current assets € '000	Current assets € '000			
Interest rate swaps	3,750	-	(28,607)	-	(24,857)
Inflation linked interest rate swaps	-	-	(619,204)	(14,838)	(634,042)
Currency swaps	43,040	5,768	-	-	48,808
Foreign exchange contracts	283	6,820	(12,049)	(14,013)	(18,959)
Forward fuel price contracts	11,999	82,523	(94,677)	(178,253)	(178,408)
Forward electricity price contracts	177,493	119,289	-	-	296,782
	236,565	214,400	(754,537)	(207,104)	(510,676)

PARENT	2016		Non-current liabilities € '000	Current liabilities € '000	Total € '000
	Non-current assets € '000	Current assets € '000			
Interest rate swaps	2,738	90	-	-	2,828
Currency swaps	61,289	-	(10,270)	-	51,019
Foreign exchange contracts	4,379	7,590	(619)	(16,185)	(4,835)
Forward fuel price contracts	13,768	92,281	(10,144)	(46,783)	49,122
Forward electricity price contracts	-	38,681	-	(2,161)	36,520
	82,174	138,642	(21,033)	(65,129)	134,654

	2015		Non-current liabilities € '000	Current liabilities € '000	Total € '000
	Non-current assets € '000	Current assets € '000			
Interest rate swaps	17	-	-	-	17
Currency swaps	43,040	5,768	-	-	48,808
Foreign exchange contracts	283	6,767	(2,174)	(13,898)	(9,022)
Forward fuel price contracts	11,999	82,523	(40,495)	(136,761)	(82,734)
Forward electricity price contracts	37,566	44,340	-	-	81,906
	92,905	139,398	(42,669)	(150,659)	38,975

With the exception of inflation linked interest rate swaps, the great majority of the derivative balances shown in the tables above are designated as cash flow hedges of interest rate, currency or commodity risk arising from highly probable forecast interest, revenue, or other operating cost cash flows.

When interpreting the positive and negative fair values of derivative financial instruments, it should be noted that they are matched with underlying transactions with offsetting risks. The fair value of derivative financial instruments is determined by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a risk-free interest rate.

NOTES TO THE FINANCIAL STATEMENTS

20. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

(a) Fair value by class of derivative financial instrument (continued)

The interest rate used to discount future estimated cash flows was 0.9% (2015: 0.9%). The rate is based on the EURIBOR yield curve at the reporting date.

(i) Interest rate swaps

The Group has executed interest rate swaps of Stg£817.4 million in connection with certain of its borrowings, including project finance debt secured by Carrington Power Limited and West Durham Wind Farm Limited, fixed rate borrowings held by the Parent and ESB Finance DAC and 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 year end. As interest rate swaps are marked to market at the year end, their carrying value is equal to their fair value.

Total fair value losses of €6.2 million (2015: gain of €8.6 million) were recognised during the year in relation to interest rate swaps, of which gains of €8.2 million (2015: gain €2.9 million) were recognised directly in finance costs in the income statement, with losses of €14.4 million recognised in OCI (2015: gains of €5.7 million recognised in OCI).

(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 IAS 39 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.

Arising from movements in forward interest rates, UK RPI forward prices, and foreign currency exchange rates during the year, negative fair value movements of €64.4 million on these swaps occurred in the year ended 31 December 2016 (31 December 2015: positive fair value movements of €7.2 million). Negative fair value movements in the underlying swaps of €187.6 million, reflected in finance costs in the income statement (note 7), which includes payments of €15.9 million arising under the swaps during the year, were partly offset by positive translation movements of €123.2 million during the year on translation of the swaps from sterling to euro.

(iii) Currency swaps

The fair value of currency swaps is 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 19. 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 periods to maturity from 2010 to 2023.

Ineffectiveness under the meaning of IAS 39 arose on the currency swaps during the year and resulted in the recognition of a debit of €0.5 million (2015: €nil) within finance costs in the income statement. Separately included in the income statement in 2016 is a transfer from the cash flow hedge reserve of €10.4 million (2015: transfer of €63.7 million) arising on cross currency swaps which is fully offset by movements in the translation of the underlying hedged foreign currency borrowings at the prevailing exchange rates (see note 7).

In addition to foreign currency forward contracts entered into in relation to the Group's borrowings, the Group has entered into foreign currency contracts in relation to pool purchases, fuel purchase requirements (which are in US dollars, Swiss francs and sterling) and in relation to power station projects (including Carrington Power Limited). These contracts have maturities extending until 2022. Total positive fair value movements of €19.9 million (2015: negative movements of €1.4 million) were recognised during the year in relation to such foreign exchange contracts, of which a positive fair value movement of €13.6 million (2015: negative movements of €13.0 million) was recognised through other comprehensive income and a positive fair value movement of €6.3 million (2015: positive movements of €11.6 million) was recognised in the income statement.

Fair value hierarchy

Further information on the methods of valuing financial instruments is included in note 26.

NOTES TO THE FINANCIAL STATEMENTS

20. 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 €601.2 million (2015: €549.6 million) are included in the Group balances below, but do not comprise part of the Parent's assets and liabilities. See note 26 (b) for further analysis of Group and Parent financial assets and liabilities.

	Carrying amount € '000	Contractual cash outflows / (inflows) - net € '000	Within 1 year € '000	1-2 years € '000	2-5 years € '000	More than 5 years € '000
31 December 2016						
Interest rate swaps	49,660	122,726	5,263	14,352	28,929	74,182
Inflation linked interest rate swaps	698,472	769,639	14,900	11,935	104,776	638,028
Currency swaps	10,270	3,136	136	2,852	108	40
Foreign exchange contracts	16,804	16,804	16,185	609	10	-
Forward fuel price contracts	57,869	57,933	47,691	9,770	472	-
Forward electricity price contracts	20,679	20,620	10,091	10,282	247	-
Total liabilities	853,754	990,858	94,266	49,800	134,542	712,250
Interest rate swaps	15,901	16,710	3,724	3,595	9,183	208
Currency swaps	61,289	118,528	6,900	17,384	60,922	33,322
Foreign exchange contracts	17,684	17,685	7,706	4,368	1,394	4,217
Forward fuel price contracts	131,385	131,677	104,491	25,944	1,242	-
Forward electricity price contracts	160,932	158,367	88,111	51,322	18,934	-
Total assets	387,191	442,967	210,932	102,613	91,675	37,747
Net derivative (assets) / liabilities	466,563	547,891	(116,666)	(52,813)	42,867	674,503
31 December 2015						
Interest rate swaps	28,607	116,337	11,862	14,772	39,948	49,755
Inflation linked interest rate swaps	634,042	769,639	14,900	11,935	104,776	638,028
Foreign exchange contracts	26,062	26,291	13,974	2,985	2,024	7,308
Forward fuel price contracts	272,930	273,872	170,783	73,442	29,647	-
Total liabilities	961,641	1,186,139	211,519	103,134	176,395	695,091
Interest rate swaps	3,750	21,912	3,728	3,649	13,810	725
Currency swaps	48,808	105,950	11,490	5,702	63,649	25,109
Foreign exchange contracts	7,103	7,078	6,795	249	34	-
Forward fuel price contracts	94,522	94,025	81,963	12,026	36	-
Forward electricity price contracts	296,782	296,241	118,698	103,577	73,966	-
Total assets	450,965	525,206	222,674	125,203	151,495	25,834
Net derivative (assets) / liabilities	510,676	660,933	(11,155)	(22,069)	24,900	669,257

NOTES TO THE FINANCIAL STATEMENTS

21. PENSION LIABILITIES

The Group operates a number of pension schemes for staff in both the Republic of Ireland and Northern Ireland. Pension arrangements in respect of staff in the Republic of Ireland including ESB employees seconded overseas are set out in sections (a) and (b) below. Pension arrangements in respect of staff in Northern Ireland are described in section (c).

(a) Parent and Group - Republic of Ireland

(i) ESB Defined Benefit Pension Scheme (The Scheme)

Pensions for the majority of employees in the electricity business are funded through a contributory pension scheme called the ESB Defined Benefit 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 Communications, Climate Action and Environment. Should a deficit arise in the future, the Company 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 the Company 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 the Company 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. 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.

The Scheme does not have a deficit on an on-going actuarial basis. It would have a deficit in a wind-up situation (Minimum Funding Standard) but a funding plan has been approved by the Pensions Authority to resolve this deficit by 2018. According to the last Minimum Funding Standard review in 2015 this plan was on track and there are no plans to wind up the Scheme. The Company does not intend that any further contributions, other than the normal on-going contributions (up to 16.4% of pensionable salary, in addition to employee contributions of up to 8.5%) and the balance of the Company's €591.0 million additional contribution (committed to as part of the 2010 Agreement), will be made. Should a deficit arise in the future, the obligation on the Company, as set out in the Scheme regulations, to consult with the parties to the Scheme remains unchanged.

Definitions

There are three different methods of assessing the financial status of the Scheme:

- Ongoing Actuarial Evaluation
- 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 the Company continue in existence for the foreseeable future - it is not a wind-up valuation. The Scheme Actuary confirmed in 2016 that the Scheme is in balance on an on-going actuarial basis, 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. 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 reported at the end of 2011 that the Scheme did not satisfy the Minimum Funding Standard requirements. To address this, the Scheme Trustees, with the agreement of ESB, submitted a funding plan to the Pensions Authority, which was approved in October 2012. This funding plan aims to resolve the Minimum Funding Standard requirements by the end of 2018 and during 2016 the Scheme Actuary confirmed that this Plan was on track to meet that objective based on existing contribution levels (including the €591.0 million commitment from the 2010 Pensions Agreement).

NOTES TO THE FINANCIAL STATEMENTS

21. PENSION LIABILITIES (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 €524.8 million to the Scheme are also included on the balance sheet, made up of;
 - 2010 Pension Agreement Injection – the Company committed to making an exceptional cash injection of €591.0 million (PV in 2010 money based on a rate of 6.25%) over a period of up to 12 years into the Scheme. Amounts yet to be paid to the Scheme under this part of the Pension Agreement are effectively subject to an annual financing charge and this is expensed in the income statement. €443.7 million has been paid into the Scheme to date.
 - 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.
 - Past Voluntary Severance (VS) programmes – in 2010 the Company 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.

(b) ESB Defined Contribution Pension Scheme - Republic of Ireland

ESB also operates an approved defined contribution scheme called ESB Defined Contribution Pension Scheme for employees of ESB subsidiary companies (other than NIE Networks) 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 assets of the Scheme are held in a separate Trustee administered fund. The pension charge for the year represents the defined employer contribution and amounted to €9.7 million (2015: €8.6 million).

(c) Northern Ireland Electricity Networks (NIE Networks) Pension Scheme

The majority of the employees in NIE Networks Limited and subsidiaries (NIE Networks) are members of the NIE Networks 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. The assets of the NIE Networks Scheme are held under trust and invested by the Trustees on the advice of professional investment managers.

In June 2011, the IASB published an amended version of IAS 19 Employee Benefits which is applicable for annual periods beginning on or after 1 January 2013. As a result of this change, the Group determines the net interest expense by applying the discount rate used to measure the pension obligation at the beginning of the annual period to the net liability.

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 2016	% at 31 December 2015
Rate of interest applied to discount liabilities	2.70	3.80
Price inflation (CPI in the United Kingdom)	2.10	1.90
Rate of increase of pensionable salaries	3.20	3.00
Rate of increase of pensions in payment	2.10	1.90

The discount rate used in the calculation of the pension liability at 31 December 2016 was 2.7% (2015: 3.8%). 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

21. PENSION LIABILITIES (continued)

(c) Northern Ireland Electricity Networks (NIE Networks) 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 2016 Males Years	Females Years	At 31 December 2015 Males Years	Females Years
Current pensioners at aged 60	27.3	29.8	27.1	29.7
Future pensioners currently aged 40 (life expectancy age 60)	29.2	31.8	29.1	31.7

Pension assets and liabilities

The assets and liabilities in the Focus section of the NIE Networks Scheme are:

	At 31 December 2016 €'000	At 31 December 2015 €'000
Equities	276,927	289,938
Bonds	295,498	276,179
Multi-asset credit investment	249,830	239,510
Diversified growth	464,855	539,971
Other	6,316	6,676
Fair value of plan assets	1,293,426	1,352,274
Present value of funded obligations	(1,463,969)	(1,494,343)
Net deficit	(170,543)	(142,069)

NIE Networks has a deficit repair plan in place to address the above deficit.

NOTES TO THE FINANCIAL STATEMENTS

21. PENSION LIABILITIES (continued)

(c) Northern Ireland Electricity Networks (NIE Networks) Pension Scheme (continued)

	At 31 December 2016 €'000	At 31 December 2015 €'000
Change in benefit obligation		
Benefit obligation at the beginning of the year	1,494,343	1,483,207
Movement during the year:		
Current service cost	7,859	10,126
Interest cost	49,537	54,549
Plan members' contributions	496	603
Actuarial loss / (gain) - impact of assumption changes	212,470	(46,943)
Actuarial gain - experience loss	(8,744)	(23,437)
Benefits paid	(70,561)	(78,530)
Re-apportionment of PES liabilities to NIE Networks Limited	-	2,604
Past service cost	178	147
Translation difference on benefit obligation in the year	(221,609)	92,017
Benefit obligation at the end of the year	1,463,969	1,494,343
Change in plan assets		
Fair value of plan assets at the beginning of the year	1,352,274	1,319,185
Movement during the year:		
Interest on plan assets	45,225	48,898
Actuarial gains / (losses)	137,206	(53,160)
Employer contributions	27,902	31,281
Plan members' contributions	496	603
Re-apportionment of PES liabilities to NIE Networks Limited	-	2,604
Other	-	(120)
Benefits paid	(70,561)	(78,530)
Translation difference on assets in the year	(199,116)	81,513
Fair value of plan assets at the end of the year	1,293,426	1,352,274
Actual return on plan assets for the year	182,431	(4,261)
	2016 €'000	2015 €'000
Analysis of the amounts recognised in the employee costs as part of the employee benefit charge were as follows:		
Current service cost	(7,859)	(10,126)
Past service costs	(178)	(147)
Total defined benefit charge in year	(8,037)	(10,273)
	2016 €'000	2015 €'000
Analysis of the amounts recognised in the finance costs, as net pension scheme interest:		
Interest on pension scheme assets	45,225	48,898
Interest on pension scheme liabilities	(49,537)	(54,549)
Net pension scheme interest	(4,312)	(5,651)
	2016 €'000	2015 €'000
Analysis of the amounts recognised in the Statement of Comprehensive Income:		
Actual returns on assets less interest	137,206	(53,160)
Actuarial (loss) / gain on liabilities	(203,726)	70,380
Net actuarial (loss) / gain	(66,520)	17,220
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.		
	2016 € m	2015 € m
Pension liability		
Discount rate (0.1% movement)	18.5	19.6
Inflation rate (0.1% movement)	(16.1)	(19.9)
Future mortality (1 year)	(49.6)	(43.2)

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

22. LIABILITY - ESB PENSION SCHEME AND EMPLOYEE RELATED LIABILITIES

GROUP	Liability - ESB pension scheme € '000	Employee related liabilities		
		Restructuring liabilities € '000	Other € '000	Total € '000
Balance at 1 January 2015	731,070	133,164	32,538	165,702
Movements during the year:				
(Release) / charge to the income statement	-	(3,998)	28,306	24,308
Utilised during the year	(113,729)	(18,644)	(27,191)	(45,835)
Financing charge	30,788	1,190	-	1,190
Translation differences	-	14	31	45
Balance at 31 December 2015	648,129	111,726	33,684	145,410
Balance at 1 January 2016	648,129	111,726	33,684	145,410
Movements during the year:				
Charge to the income statement	-	-	43,409	43,409
Utilised during the year	(152,974)	(16,906)	(30,039)	(46,945)
Financing charge	29,657	835	-	835
Translation differences	-	(8)	-	(8)
Balance at 31 December 2016	524,812	95,647	47,054	142,701
Analysed as follows:				
Non-current liabilities	370,308	78,396	-	78,396
Current liabilities	154,504	17,251	47,054	64,305
Total	524,812	95,647	47,054	142,701
PARENT	Liability - ESB pension scheme € '000	Employee related liabilities		
		Restructuring liabilities € '000	Other € '000	Total € '000
Balance at 1 January 2015	731,070	132,971	24,290	157,261
Movements during the year:				
(Release) / charge to the income statement	-	(3,998)	24,045	20,047
Utilised during the year	(113,729)	(18,738)	(22,471)	(41,209)
Financing charge	30,788	1,190	-	1,190
Balance at 31 December 2015	648,129	111,425	25,864	137,289
Balance at 1 January 2016	648,129	111,425	25,864	137,289
Movements during the year:				
Charge to the income statement	-	-	35,318	35,318
Utilised during the year	(152,974)	(16,812)	(22,338)	(39,150)
Financing charge	29,657	835	-	835
Balance at 31 December 2016	524,812	95,448	38,844	134,292
Analysed as follows:				
Non-current liabilities	370,308	78,197	-	78,197
Current liabilities	154,504	17,251	38,844	56,095
Total	524,812	95,448	38,844	134,292

NOTES TO THE FINANCIAL STATEMENTS

22. LIABILITY- ESB PENSION SCHEME AND EMPLOYEE RELATED LIABILITIES (continued)

Liability - ESB pension scheme
See note 21 (a).

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 2027. Expected future cash flows are discounted to present value using long-term interest rates based on a zero-coupon 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, bonuses and profit share arrangements.

23. TRADE AND OTHER PAYABLES

	GROUP		PARENT	
	2016	2015	2016	2015
	€ '000	€ '000	€ '000	€ '000
Current payables:				
Trade payables	434,865	350,692	237,825	180,786
Progress payments on work in progress	80,220	76,815	1,462	-
Other payables	65,966	43,070	36,764	19,089
Employment taxes	18,550	20,199	16,729	18,216
Value added tax	43,337	35,681	19,917	14,992
Accruals	114,122	85,737	25,448	20,741
Amounts owed to subsidiary undertakings	-	-	3,415,444	3,104,118
Accrued interest on borrowings	77,958	83,341	35,606	35,670
Total	835,018	695,535	3,789,195	3,393,612
	2016	2015	2016	2015
	€ '000	€ '000	€ '000	€ '000
Non-current payables:				
Other payables	-	8,686	-	-

NOTES TO THE FINANCIAL STATEMENTS

24. DEFERRED INCOME AND GOVERNMENT GRANTS

GROUP	Supply contributions and other €'000
Balance at 1 January 2015	578,844
Receivable	36,959
Released to the income statement	(57,530)
Translation differences	11
Balance at 31 December 2015	558,284
Balance at 1 January 2016	558,284
Receivable	38,994
Released to the income statement	(58,548)
Translation differences	(2,178)
Balance at 31 December 2016	536,552
Analysed as follows:	
Non-current liabilities	486,531
Current liabilities	50,021
Total	536,552
PARENT	Supply contributions and other €'000
Balance at 1 January 2015	567,460
Receivable	1,034
Released to the income statement	(32,422)
Transfer to Group	(2,530)
Balance at 31 December 2015	533,542
Balance at 1 January 2016	533,542
Receivable	1,240
Released to the income statement	(33,118)
Balance at 31 December 2016	501,664
Analysed as follows:	
Non-current liabilities	468,556
Current liabilities	33,108
Total	501,664

Non-repayable supply contributions and capital grants received prior to July 2009 were recorded as deferred income and released to the income statement on a basis consistent with the depreciation policy of the relevant assets. Accounting for supply contributions post July 2009 have been described further in the statement of accounting policies in these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

25. PROVISIONS

GROUP	Power station closure costs € '000	Emissions provisions € '000	Other € '000	Total € '000
Balance at 1 January 2015	135,105	49,331	57,255	241,691
Charge / (credit) to the income statement				
- Emissions	-	63,145	-	63,145
- Legal and other	-	-	14,821	14,821
ESOP provision (note 30)	-	-	12,080	12,080
Utilised in the year	(5,139)	(50,259)	(3,750)	(59,148)
Financing charge	1,568	-	462	2,030
Translation differences	173	(85)	724	812
Balance at 31 December 2015	131,707	62,132	81,592	275,431
Balance at 1 January 2016	131,707	62,132	81,592	275,431
Charge / (credit) to the income statement				
- Emissions	-	64,266	-	64,266
- Legal and other	-	-	4,530	4,530
- Station closure	(5,700)	-	-	(5,700)
Station closure provision capitalised in the year	56,900	-	-	56,900
ESOP provision (note 30)	-	-	7,000	7,000
Utilised in the year	(3,623)	(61,154)	(15,860)	(80,637)
Financing charge	1,482	-	537	2,019
Translation differences	(465)	159	(1,528)	(1,834)
Balance at 31 December 2016	180,301	65,403	76,271	321,975
Analysed as follows:				
Non-current liabilities	178,578	-	58,575	237,153
Current liabilities	1,723	65,403	17,696	84,822
Total	180,301	65,403	76,271	321,975

PARENT	Power station closure costs € '000	Emissions provisions € '000	Other € '000	Total € '000
Balance at 1 January 2015	129,716	40,714	45,537	215,967
Charge / (credit) to the income statement				
- Emissions	-	47,044	-	47,044
- Legal and other	-	-	2,096	2,096
ESOP provision (note 30)	-	-	12,080	12,080
Utilised in the year	(5,139)	(39,462)	(3,127)	(47,728)
Financing charge	1,388	-	462	1,850
Balance at 31 December 2015	125,965	48,296	57,048	231,309
Balance at 1 January 2016	125,965	48,296	57,048	231,309
Charge / (credit) to the income statement				
- Emissions	-	46,159	-	46,159
- Legal and other	-	-	8,079	8,079
- Station closure	(5,700)	-	-	(5,700)
Station closure provision capitalised in the year	53,500	-	-	53,500
ESOP provision (note 30)	-	-	7,000	7,000
Utilised in the year	(3,623)	(46,987)	(2,772)	(53,382)
Financing charge	1,272	-	537	1,809
Balance at 31 December 2016	171,414	47,468	69,892	288,774
Analysed as follows:				
Non-current liabilities	169,690	-	52,544	222,234
Current liabilities	1,724	47,468	17,348	66,540
Total	171,414	47,468	69,892	288,774

NOTES TO THE FINANCIAL STATEMENTS

25. PROVISIONS (continued)

Power station closure costs
The provision at 31 December 2016 of €180.3 million (31 December 2015: €131.7 million) for station closure represents the present value of the current estimate of the costs of closure of generating stations at the end of their useful economic lives. The expected closure dates of most generating stations are up to 2025. Due to changes in estimates regarding environmental costs and decommissioning, the station closure provision increased by €56.9 million in 2016 (2015: €nil). As the costs are provided on a discounted basis, a financing charge is included in the income statement and added to the provision each year. The power station closure provision is re-examined annually and the liability re-calculated in accordance with the current expected station closure dates. The estimated value of future closure costs at the balance sheet date include physical dismantling, site remediation, de-manning and associated costs.
There are a number of uncertainties that affect the calculation of the provision for station closure, including the impact of regulation, the accuracy of the site surveys, unexpected contaminants, the impact of alternative technologies and changes in the discount rate. The Group has made its best estimate of the financial effect of these uncertainties in the calculation of the provision, but future material changes in any of the assumptions could materially impact on the calculation of the provision. Expected future cash flows are discounted to present value using long-term interest rates based on a zero-coupon discount curve at the reporting date plus an appropriate credit spread.
Emissions provisions
In accordance with the provisions of the European CO ₂ 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 months from the end of that calendar year, in line with the actual emissions of CO ₂ during the year. The year end provision represents the obligation to return emissions allowances equal to the actual emissions. This obligation is measured at the carrying amount of the capitalised CO ₂ emissions allowances, in addition to the market value of any additional allowances required to settle the year end liability.
Other provisions
Other provisions represent prudent estimates of liabilities to third parties, in respect of claims notified or provided for at year end. In accordance with normal commercial practice, the year end provision includes an estimate for liabilities incurred but not yet notified.

NOTES TO THE FINANCIAL STATEMENTS

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE

(a) Overview of financial risk management

Risk environment

The main financial risks faced by the Group relate to liquidity, foreign exchange, interest rate, commodity (electricity and fuel) price movements and operational risk. Policies to protect the Group from these risks, and other risk areas, such as credit risk, are regularly reviewed, revised and approved by the Board as appropriate. Group Treasury is responsible for the day-to-day treasury activities of the Group. The Finance and Investment Committee is updated on an ongoing basis on key treasury matters and an annual report covering the treasury activity is also submitted to the Committee for review.

Commodity price risk is managed by the front and middle office functions of the relevant business units: ESB Trading (located within Generation and Wholesale Markets) and Electric Ireland. This is done in the context of an overall Group risk management framework. These activities are reviewed regularly by Group Internal Audit. The Group Trading Risk Management function ensures that the Group's market, credit and operational risks are managed in a way 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 Group Trading Committee (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.

Within each of these business units, a Trading Risk Management Committee has been established to serve as the primary overseer of trading risk at individual ring-fenced entity level. This Committee includes 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 ensuring that there is an effective control framework in place.

The Trading Risk Management Committees report to the GTC. 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. The trading operations of the business units are subject to review by Group Internal Audit.

For further information on the Group's Risk Management Policy and objectives see the Risk Management Report on pages 18 to 23.

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 IAS 39 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. All of these arrangements are designated into hedge relationships, and in the majority of cases meet the specific hedging accounting criteria of IAS 39. Where the IAS 39 hedge criteria are met in respect of cross currency swaps, interest rate swaps, foreign exchange contracts, forward fuel price contracts and forward electricity price contracts, these instruments are designated as cash flow hedges of highly probable forecast interest, revenue or other operating cost cash flows. Any derivatives on hand which are not specifically designated into hedge relationships from an accounting perspective are nevertheless regarded as valid economic hedges.

NOTES TO THE FINANCIAL STATEMENTS

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (continued)

(b) Overview of financial assets and liabilities

Financial assets and liabilities, excluding provisions and employee related liabilities, at 31 December 2016, and at 31 December 2015 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	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000
ASSETS										
Non-current assets										
Trade and other receivables	-	-	69,995	44,777	-	-	-	-	69,995	44,777
Financial asset investments	56,502	62,563	-	-	-	-	-	-	56,502	62,563
Derivative financial instruments	-	-	-	-	161,545	165,993	22,454	70,572	183,999	236,565
Total non-current financial assets	56,502	62,563	69,995	44,777	161,545	165,993	22,454	70,572	310,496	343,905
Current assets										
Trade and other receivables	-	-	770,081	751,177	-	-	-	-	770,081	751,177
Cash and cash equivalents	-	-	363,624	133,863	-	-	-	-	363,624	133,863
Derivative financial instruments	-	-	-	-	131,647	181,205	71,545	33,195	203,192	214,400
Total current financial assets	-	-	1,133,705	885,040	131,647	181,205	71,545	33,195	1,336,897	1,099,440
Total financial assets	56,502	62,563	1,203,700	929,817	293,192	347,198	93,999	103,767	1,647,393	1,443,345
LIABILITIES										
Non-current liabilities										
Borrowings and other debt	-	-	4,398,113	4,690,314	-	-	-	-	4,398,113	4,690,314
Trade and other payables	-	-	-	8,686	-	-	-	-	-	8,686
Derivative financial instruments	-	-	-	-	53,496	110,664	700,472	643,873	753,968	754,537
Total non-current financial liabilities	-	-	4,398,113	4,699,000	53,496	110,664	700,472	643,873	5,152,081	5,453,537
Current liabilities										
Borrowings and other debt	-	-	489,330	418,825	-	-	-	-	489,330	418,825
Trade and other payables	-	-	835,018	695,535	-	-	-	-	835,018	695,535
Derivative financial instruments	-	-	-	-	27,903	115,647	71,883	91,457	99,786	207,104
Total current financial liabilities	-	-	1,324,348	1,114,360	27,903	115,647	71,883	91,457	1,424,134	1,321,464
Total financial liabilities	-	-	5,722,461	5,813,360	81,399	226,311	772,355	735,330	6,576,215	6,775,001

NOTES TO THE FINANCIAL STATEMENTS

26. DERIVATIVE FINANCIAL INSTRUMENTS (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	
	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000	2016 € '000	2015 € '000
PARENT										
ASSETS										
Non-current assets										
Derivative financial instruments	-	-	-	-	74,428	63,443	7,746	29,462	82,174	92,905
Total non-current financial assets	-	-	-	-	74,428	63,443	7,746	29,462	82,174	92,905
Current assets										
Trade and other receivables	-	-	3,091,981	3,181,023	-	-	-	-	3,091,981	3,181,023
Cash and cash equivalents	-	-	235,991	17,202	-	-	-	-	235,991	17,202
Derivative financial instruments	-	-	-	-	73,368	69,400	65,274	69,998	138,642	139,398
Total current financial assets	-	-	3,327,972	3,198,225	73,368	69,400	65,274	69,998	3,466,614	3,337,623
Total financial assets	-	-	3,327,972	3,198,225	147,796	132,843	73,020	99,460	3,548,788	3,430,528
LIABILITIES										
Non-current liabilities										
Borrowings and other debt	-	-	1,409,367	1,488,584	-	-	-	-	1,409,367	1,488,584
Derivative financial instruments	-	-	-	-	6,778	21,968	14,255	20,701	21,033	42,669
Total non-current financial liabilities	-	-	1,409,367	1,488,584	6,778	21,968	14,255	20,701	1,430,400	1,531,253
Current liabilities										
Borrowings and other debt	-	-	132,858	365,397	-	-	-	-	132,858	365,397
Trade and other payables	-	-	3,789,195	3,393,612	-	-	-	-	3,789,195	3,393,612
Derivative financial instruments	-	-	-	-	14,657	74,040	50,472	76,619	65,129	150,659
Total current financial liabilities	-	-	3,922,053	3,759,009	14,657	74,040	50,472	76,619	3,987,182	3,909,668
Total financial liabilities	-	-	5,331,420	5,247,593	21,435	96,008	64,727	97,320	5,417,582	5,440,921

The Group's provisions and employee related liabilities are not analysed in the table above, or in the further analysis on the next page. This includes the liability for pension obligation of €524.8 million at 31 December 2016 (2015: €648.1 million). See notes 21, 22 and 25 for further information in relation to this and to the other provisions and employee related liabilities.

NOTES TO THE FINANCIAL STATEMENTS

26. 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 €3,345.2 million (2015: €3,255.5 million), and net derivative financial instrument assets of €601.2 million (2015: €549.6 million) are included in the Group balances below, but do not comprise part of the Parent's assets and liabilities. See notes 19, 20 and 23 for further analysis of Group and Parent financial assets and liabilities.

	Carrying amount € '000	Contractual cash outflows / (inflows) - net € '000	Within 1 year € '000	1-2 years € '000	2-5 years € '000	More than 5 years € '000
31 December 2016						
Borrowings	4,887,443	6,190,094	693,739	584,784	1,571,882	3,339,689
Trade and other payables (excluding tax balances and accrued interest on borrowings)	695,173	695,173	695,173	-	-	-
Derivative financial liability	853,754	990,857	94,265	49,800	134,542	712,250
Total liabilities	6,436,370	7,876,124	1,483,177	634,584	1,706,424	4,051,939
Derivative financial asset	387,191	442,958	210,932	102,614	91,675	37,747
Total assets	387,191	442,958	210,932	102,614	91,675	37,747
Net liabilities	6,049,179	7,433,166	1,272,245	531,970	1,614,749	4,014,192
31 December 2015						
Borrowings	5,109,139	6,575,854	643,041	692,034	2,298,129	2,942,650
Trade and other payables (excluding tax balances and accrued interest on borrowings)	565,000	565,000	556,314	8,686	-	-
Derivative financial liability	961,641	1,186,139	211,519	103,134	176,395	695,091
Total liabilities	6,635,780	8,326,993	1,410,874	803,854	2,474,524	3,637,741
Derivative financial asset	450,965	525,206	222,674	125,203	151,495	25,834
Total assets	450,965	525,206	222,674	125,203	151,495	25,834
Net liabilities	6,184,815	7,801,787	1,188,200	678,651	2,323,029	3,611,907

NOTES TO THE FINANCIAL STATEMENTS

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (continued)

(d) Master netting or similar agreements

The Group enters into derivative transactions under International Swaps and Derivative Association (ISDA) master netting agreements. In general, under such agreements the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency or commodity are aggregated into a single net amount that is payable by one party to the other. In certain circumstances - for example when a credit event such as default occurs - all outstanding transactions under the agreement are terminated, the termination value is assessed and only a single net amount if payable in settlement of all transactions.

The following tables provide information on the impact of netting for instruments subject to an enforceable master netting agreement or similar agreement and 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 € '000	Amounts not offset on the balance sheet € '000	Net amount € '000
31 December 2016			
Financial assets			
Interest rate swaps	15,901	(11,340)	4,561
Currency swaps	61,289	(7,964)	53,325
Foreign exchange contracts	17,684	(14,369)	3,315
Forward fuel price contracts	131,385	(43,661)	87,724
Forward electricity price contracts	160,932	(18,426)	142,506
	387,191	(95,760)	291,431
Financial liabilities			
Interest rate swaps	(49,660)	14,099	(35,561)
Inflation linked interest rate swaps	(698,472)	-	(698,472)
Currency swaps	(10,270)	9,885	(385)
Foreign exchange contracts	(16,804)	13,978	(2,826)
Forward fuel price contracts	(57,869)	56,596	(1,273)
Forward electricity price contracts	(20,679)	1,202	(19,477)
	(853,754)	95,760	(757,994)
31 December 2015			
Financial assets			
Interest rate swaps	3,750	(1,520)	2,230
Currency swaps	48,808	-	48,808
Foreign exchange contracts	7,103	(6,179)	924
Forward fuel price contracts	94,522	(74,708)	19,814
Forward electricity price contracts	296,782	(65,563)	231,219
	450,965	(147,970)	302,995
Financial liabilities			
Interest rate swaps	(28,607)	1,520	(27,087)
Inflation linked interest rate swaps	(634,042)	-	(634,042)
Foreign exchange contracts	(26,062)	17,296	(8,766)
Forward fuel price contracts	(272,930)	129,154	(143,776)
	(961,641)	147,970	(813,671)

NOTES TO THE FINANCIAL STATEMENTS

26. 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 € '000	Amounts not offset on the balance sheet € '000	Net amount € '000
31 December 2016			
Financial assets			
Interest rate swaps	2,828	(1,570)	1,258
Currency swaps	61,289	(4,120)	57,169
Foreign exchange contracts	11,969	(6,593)	5,376
Forward fuel price contracts	106,049	(43,053)	62,996
Forward electricity price contracts	38,681	(4,036)	34,645
	220,816	(59,372)	161,444
Financial liabilities			
Currency swaps	(10,270)	6,720	(3,550)
Foreign exchange contracts	(16,804)	10,169	(6,635)
Forward fuel price contracts	(56,927)	42,224	(14,703)
Forward electricity price contracts	(2,161)	259	(1,902)
	(86,162)	59,372	(26,790)
31 December 2015			
Financial assets			
Interest rate swaps	17	-	17
Currency swaps	48,808	-	48,808
Foreign exchange contracts	7,050	(5,757)	1,293
Forward fuel price contracts	94,522	(60,196)	34,326
Forward electricity price contracts	81,906	(76,606)	5,300
	232,303	(142,559)	89,744
Financial liabilities			
Foreign exchange contracts	(16,072)	13,635	(2,437)
Forward fuel price contracts	(177,256)	128,924	(48,332)
	(193,328)	142,559	(50,769)

NOTES TO THE FINANCIAL STATEMENTS

26. 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 outstanding receivables and committed transactions.

Financial assets	2016		2015	
	GROUP € '000	PARENT € '000	GROUP € '000	PARENT € '000
Trade and other receivables	840,076	3,119,337	795,954	3,181,023
Cash and cash equivalents	363,624	235,991	133,863	17,202
Derivative financial instruments	387,191	220,816	450,965	232,303
	1,590,891	3,576,144	1,380,782	3,430,528

Trade and other receivables

Wholesale and credit risk arising from trade and other receivables has been disclosed in note 15.

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. 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.

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. 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 collateral held at year end was €45.0 million (2015: €49.7 million). Given the current economic environment, the Group is particularly cognisant of any changes in the creditworthiness of counterparties, and where such a change occurs, all appropriate steps are taken to further secure the Group's position.

NOTES TO THE FINANCIAL STATEMENTS

26. 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 required, other purchases denominated in foreign currencies, borrowings in foreign currencies (including the private placement as described in note 19) 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 2016 relate to forecast cash flows expected to occur up to 2028.

At year end, ESB's total debt portfolio amounted to €4.9 billion (2015: €5.1 billion), of which the Parent held €1.5 billion (2015: €1.8 billion). The underlying debt, before and after swaps, was denominated in the following currencies:

GROUP	Before swaps		After swaps	
	2016 (%)	2015 (%)	2016 (%)	2015 (%)
Currency				
Euro	50	47	62	58
US dollar	11	11	-	-
Sterling	39	42	38	42
Total	100	100	100	100

PARENT	Before swaps		After swaps	
	2016 (%)	2015 (%)	2016 (%)	2015 (%)
Currency				
Euro	37	45	76	75
US dollar	39	31	-	-
Sterling	24	24	24	25
Total	100	100	100	100

As shown above, the majority of the Parent 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 substantial proportion of debt is sterling denominated primarily as a result of the NIE Networks acquisition.

A general increase of 10% in foreign currency exchange rates at 31 December 2016 would increase equity and profit before taxation by the amount set out below. This analysis assumes that all other variables remain constant, and includes the impact of the value of commodity swaps in place, all of which are in effective hedge relationships at 31 December 2016.

GROUP	31 December 2016		31 December 2015	
	Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000	Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
10% Strengthening				
US dollar	(13,454)	41	(25,275)	540
Sterling	5,812	(301)	19,641	(3,434)
Swiss franc	(544)	-	(948)	-
10% Weakening				
US dollar	16,444	(922)	30,891	(660)
Sterling	(7,104)	246	(24,006)	4,197
Swiss franc	664	-	1,158	-

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;
- changes in the carrying value of derivative financial instruments designated as net investment hedges arising from movements in the euro to sterling exchange rate are recorded directly in equity, with no ineffectiveness assumed.

NOTES TO THE FINANCIAL STATEMENTS

26. 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 20 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.

A general increase of 10% in the price of gas and coal at 31 December 2016 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, all of which are in effective hedge relationships at 31 December 2016. A 10% reduction would have an equal and opposite effect, on the basis that all other variables remain constant.

GROUP	31 December 2016 Other comprehensive income gain / (loss) €'000	Profit before taxation gain / (loss) € '000	31 December 2015 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
(Loss) / gain due to 10% increase in gas and coal prices	(38,660)	(52)	42,072	(2,340)

PARENT	31 December 2016 Other comprehensive income gain/ (loss) € '000	Profit before taxation gain / (loss) € '000	31 December 2015 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
(Loss) / gain due to 10% increase in gas and coal prices	(16,384)	(52)	5,707	(2,340)

A general increase of 10% in the System Market Price (SMP) of the Single Electricity Market at 31 December 2016 would have increased 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, and includes the impact on the value of commodity swaps in place. A 10% reduction would have an equal and opposite effect, on the basis that all other variables remained constant.

GROUP	31 December 2016 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000	31 December 2015 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
Gain / (loss) due to 10% increase in the SMP	26,311	-	(29,775)	-

PARENT	31 December 2016 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000	31 December 2015 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
Gain / (loss) due to 10% increase in the SMP	-	-	-	-

The sensitivity analysis provided above for the Group and Parent has been calculated as at 31 December 2016 using the following base commodity prices and foreign currency rates:

	2016	2015
Gas (Stg. p/therm)	49.20	33.70
SMP (€/MWh)	53.01	45.09
Coal (US\$/tonne)	69.50	43.27
Foreign currency rate (US\$ = €1)	1.05	1.09
Foreign currency rate (Stg\$ = €1)	0.8562	0.7340

NOTES TO THE FINANCIAL STATEMENTS

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (continued)

(h) Fair value

The fair values of financial assets and liabilities together with the carrying amounts shown in the balance sheet are as follows:

	GROUP Carrying value 2016 € '000	Fair value 2016 € '000	PARENT Carrying value 2016 € '000	Fair value 2016 € '000
31 December 2016				
Long-term debt	4,398,113	5,507,281	1,409,367	1,775,307
Short-term borrowings	489,330	530,046	132,858	62,803
Total borrowings	4,887,443	6,037,327	1,542,225	1,838,110
Non-current trade and other payables	-	-	-	-
Current trade and other payables	835,018	835,018	3,789,195	3,816,549
Non-current trade and other receivables	(69,995)	(125,180)	-	-
Current trade and other receivables	(770,081)	(770,081)	(3,091,981)	(3,119,337)
Cash and cash equivalents	(363,624)	(363,624)	(235,991)	(235,991)
Net liabilities	4,518,761	5,613,460	2,003,448	2,299,331

	GROUP Carrying value 2015 € '000	Fair value 2015 € '000	PARENT Carrying value 2015 € '000	Fair value 2015 € '000
31 December 2015				
Long-term debt	4,690,314	5,290,073	1,488,584	1,875,656
Short-term borrowings	418,825	472,381	365,397	460,410
Total borrowings	5,109,139	5,762,454	1,853,981	2,336,066
Non-current trade and other payables	8,686	8,513	-	-
Current trade and other payables	695,535	695,535	3,393,612	3,393,612
Non-current trade and other receivables	(44,777)	(66,001)	-	-
Current trade and other receivables	(751,177)	(751,177)	(3,181,023)	(3,181,023)
Cash and cash equivalents	(133,863)	(133,863)	(17,202)	(17,202)
Net liabilities	4,883,543	5,515,461	2,049,368	2,531,453

Current trade and other receivables which 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. The fair value of trade and other payables and long-term receivables is calculated based on the present value of future cash flows, discounted at the market rate interest rate or where applicable a specific interest rate has been applied.

Borrowings and other debt are Level 2 fair values. The valuation technique used for borrowings and other debt is a comparison of debt stock to the marginal cost of debt (from main funding markets) in addition to discounting 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 EURIBOR yield curve at the reporting date plus an appropriate constant credit spread, and were as follows:

	2016 %	2015 %
Other loans and borrowings	1.7	2.2
Derivative financial instruments	0.7	0.9
Trade and other payables	0.8	1.0

NOTES TO THE FINANCIAL STATEMENTS

26. 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 € '000	Level 3 € '000	Total € '000
31 December 2016			
ASSETS			
Derivative financial instruments			
- Currency swaps	61,289	-	61,289
- Foreign exchange contracts	17,684	-	17,684
- Forward fuel price contracts	106,048	25,337	131,385
- Forward electricity price contracts	-	160,932	160,932
- Interest rate swaps	15,901	-	15,901
Financial assets at fair value through profit or loss	-	55,932	55,932
	200,922	242,201	443,123
LIABILITIES			
Derivative financial instruments			
- Currency swaps	(10,270)	-	(10,270)
- Foreign exchange contracts	(16,804)	-	(16,804)
- Forward fuel price contracts	(56,926)	(943)	(57,869)
- Forward electricity price contracts	-	(20,679)	(20,679)
- Interest rate swaps	(49,660)	-	(49,660)
- Inflation linked interest rate swaps	(698,472)	-	(698,472)
	(832,132)	(21,622)	(853,754)
Net (liability) / asset	(631,210)	220,579	(410,631)

	Level 2 € '000	Level 3 € '000	Total € '000
31 December 2015			
ASSETS			
Derivative financial instruments			
- Currency swaps	48,808	-	48,808
- Foreign exchange contracts	7,103	-	7,103
- Forward fuel price contracts	94,522	-	94,522
- Forward electricity price contracts	574	296,208	296,782
- Interest rate swaps	3,750	-	3,750
Financial assets at fair value through profit or loss	-	61,993	61,993
	154,757	358,201	512,958
LIABILITIES			
Derivative financial instruments			
- Foreign exchange contracts	(26,062)	-	(26,062)
- Forward fuel price contracts	(177,256)	(95,674)	(272,930)
- Interest rate swaps	(28,607)	-	(28,607)
- Inflation linked interest rate swaps	(634,042)	-	(634,042)
	(865,967)	(95,674)	(961,641)
Net (liability) / asset	(711,210)	262,527	(448,683)

When interpreting the positive and negative fair values of derivative financial instruments, it should be noted that they are matched with underlying offsetting risks. The fair value of derivative financial instruments is determined by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the contract using a risk-free interest rate.

NOTES TO THE FINANCIAL STATEMENTS

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (continued)

(i) Fair value hierarchy (continued)

PARENT	Level 2 € '000	Level 3 € '000	Total € '000
31 December 2016			
ASSETS			
Derivative financial instruments			
- Currency swaps	61,289	-	61,289
- Interest rate swaps	2,828	-	2,828
- Foreign exchange contracts	11,969	-	11,969
- Forward electricity price contracts	-	38,681	38,681
- Forward fuel price contracts	106,049	-	106,049
	182,135	38,681	220,816
LIABILITIES			
Derivative financial instruments			
- Currency swaps	(10,270)	-	(10,270)
- Foreign exchange contracts	(16,804)	-	(16,804)
- Forward fuel price contracts	(56,927)	-	(56,927)
- Forward electricity price contracts	-	(2,161)	(2,161)
	(84,001)	(2,161)	(86,162)
Net asset	98,134	36,520	134,654

	Level 2 € '000	Level 3 € '000	Total € '000
31 December 2015			
ASSETS			
Derivative financial instruments			
- Currency swaps	48,808	-	48,808
- Interest rate swaps	17	-	17
- Foreign exchange contracts	7,050	-	7,050
- Forward electricity price contracts	-	81,906	81,906
- Forward fuel price contracts	94,522	-	94,522
	150,397	81,906	232,303
LIABILITIES			
Derivative financial instruments			
- Foreign exchange contracts	(16,072)	-	(16,072)
- Forward fuel price contracts	(177,256)	-	(177,256)
	(193,328)	-	(193,328)
Net (liability) / asset	(42,931)	81,906	38,975

NOTES TO THE FINANCIAL STATEMENTS

26. 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 technique	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 contracted foreign exchange cash flows using constructed zero-coupon discount curve. The zero-coupon curve is constructed using the interest yield curve of the relevant currency.		
Forward fuel and electricity price contracts	Level 2 - The fair value of forward fuel and electricity contracts is determined by reference to forward electricity, 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.	System marginal price (SMP)	The estimated fair value would increase / (decrease) if: SMP was lower / (higher). Generally a change in SMP is accompanied by a directionally similar change in gas prices.
Inflation linked interest rate swaps	Level 2 - Independent valuations are used and validated using the present valuation of expected cash flows using constructed zero-coupon discount curve. The zero-coupon curve is constructed using the interest rate yield curve of the relevant currency. Future cash flows are estimated using expected RPI benchmark levels as well as expected LIBOR rate sets.		
Financial assets at fair value through profit or loss	Discount cash flows: The valuation model considers the present value of expected cash flows. The expected payment is determined by considering the possible scenarios of forecast revenue and gross margin, future cash flows under each scenario and the probability of each scenario Market comparison technique: The valuation model is based on market multiples derived from quoted prices of companies to the investee and the expected gross margin of the investee.	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. 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

26. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (continued)

(i) Fair value hierarchy (continued)

The following table shows a reconciliation from opening balances at 1 January 2016 for the year ended 31 December 2016 balances for fair value measurements in Level 3 of the fair value hierarchy:

GROUP	Financial assets at fair value through profit or loss € '000	Forward electricity price contracts € '000	Forward fuel price contracts € '000	Total € '000
Opening balance	61,993	296,208	(95,674)	262,527
Additions	6,116	-	-	6,116
Proceeds received	(1,266)	-	-	(1,266)
Total gains / (losses):				
- in profit or loss	(9,062)	-	-	(9,062)
- in OCI	-	(82,017)	72,233	(9,784)
Settlements	-	(73,938)	47,835	(26,103)
Translation movements	(1,849)	-	-	(1,849)
Closing balance - net	55,932	140,253	24,394	220,579

Financial assets at fair value through profit or loss are carried at fair value. Where applicable, the fair value is based on the most recent fund valuation statement available adjusted for a liquidity discount. In relation to stand alone investments, the valuation methodology used is in accordance with International Private Equity and Venture Capital Valuation Guidelines which have been developed by a number of international venture capital associations. As this requires the use of model based valuation techniques, with a number of unobservable inputs, all financial assets at fair value through profit or loss have been categorised as Level 3 investments in the current year.

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 and inflation linked interest rate swaps, 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 2016 Other comprehensive income gain / (loss) € '000	Profit before taxation gain / (loss) € '000
Gain due to 10% increase in gas and coal prices	(22,276)	-
Loss due to 10% increase in the SMP	26,311	-

NOTES TO THE FINANCIAL STATEMENTS

27. COMMITMENTS AND CONTINGENCIES

(a) Operating lease obligations

Total commitments under non-cancellable operating leases are due as follows:	2016 € '000	2015 € '000
Within one year	16,631	14,256
Between two and five years	54,110	39,378
After five years	136,148	147,469
Total payable	206,889	201,103

Operating leases payable by the Group generally relate to the rental of land and buildings. These lease costs are based on open market value at the date of inception and are generally subject to rent reviews, on average, every five years. There are no significant or unusual restrictions imposed on the Group by the terms of the operating leases.

(b) Capital commitments

	2016 € '000	2015 € '000
Contracted for	248,364	336,912

(c) Fuel contract commitments

There are a number of long-term gas supply arrangements in place for different periods up to 2019. These arrangements provide for pricing changes in line with changes in inbuilt energy market indicators. Where appropriate, embedded derivatives have been separated and valued in accordance with IAS 39.

(d) Other disclosures

Following on from flooding in Cork in November 2009, Aviva as UCC's insurer pursued a legal action against ESB in the High Court seeking recovery of €19 million for property damage. On 5 October 2015 the High Court delivered its judgement in the case and found ESB 60% liable for the damage caused and UCC 40% contributorily negligent.

Based on legal advices received, ESB has appealed the decision to the Court of Appeal and the appeal has been listed for hearing over eight days commencing 31 October 2017. Pending the appeal hearing, no hearing on quantum (i.e. the actual amount of damages payable in respect of UCC's losses) will take place and the High Court has stayed its order on costs.

In addition to the UCC claim ESB has, since the judgement in the UCC case, been served with 354 sets of proceedings relating to the flooding in Cork in November 2009. Details of amounts claimed in relation to these proceedings have not yet been received and therefore it is not possible to make a reliable estimate of their cost (should the Court of Appeal find against ESB) at this time. However, ESB does not anticipate that the total amount of damages awarded, if any, and related costs for all of the actions, including the Aviva/UCC action, would exceed its applicable insurance cover.

On the basis of the internal and external legal advice received, ESB believes that it is more probable than not that the appeal will be successful and accordingly, no provision has been made for such claims in the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

28. RELATED PARTY TRANSACTIONS

Semi-state bodies

In common with many other entities, ESB deals in the normal course of business with other Government sponsored bodies such as Ervia, Bord na Móna and Coillte Teoranta. Long-term agreements are negotiated between ESB and Bord na Móna in relation to the purchase of peat for the Midland Stations.

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 year or at 31 December 2016. A portion of the cash and cash equivalents as disclosed in note 16 was on deposit with such banks.

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 repurchase

Please refer to note 30 for details of ESOP repurchase.

Subsidiary undertakings

During the year ended 31 December 2016, ESB Parent purchased engineering, consulting and other services, including rental services of €362.2 million (2015: €149.8 million) from its subsidiaries.

During the year, ESB Parent had sales of €181.2 million (2015: €149.6 million) to subsidiaries. These sales mainly relate to management services, as well as electricity charges including Use of System Charges and sales of electricity.

During the year, ESB Parent received interest of €46.2 million (2015: €50.8 million) from subsidiaries and paid interest of €70.1million (2015: €170.5 million) to subsidiaries on intercompany loans.

At 31 December 2016, ESB Parent had amounts payable of €3,415.4 million (2015: €3,104.1 million) to its subsidiaries. These payables mainly relate to amounts held on deposit for subsidiaries, borrowings raised by ESB Finance DAC and loaned to ESB Parent, as well as amounts due in respect of engineering and consulting services.

At 31 December 2016, ESB Parent had balances receivable of €2,766.9 million (2015: €2,836.7 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.

At 31 December 2016, ESB Parent had balances receivable from its subsidiaries, in relation to equity and capital contributions, of €61.8 million (2015: €61.8 million).

Equity accounted investees

ESB provided services in relation to management services and professional fees during the year to Oweninny Power DAC of €0.1 million (2015: €0.7 million), Emerald Bridge Fibres DAC of €0.3 million (2015: €0.1 million), SIRO Limited €11.9 (2015: €1.8 million), Tilbury Green Power Holdings Limited €1.0 million (2015: €5.3 million), Raheenleagh Power DAC €3.0 million (2015: €4.5 million), Castlepook Power DAC €5.2 million (2015: €nil), Kingspan ESB Limited €0.1 million (2015: €nil) and to Terra Solar Limited €0.1 million (2015: €nil).

ESB has purchased services in relations to telecoms and maintenance during the year from Emerald Bridge Fibres DAC €0.1 million (2015: €0.1 million), Raheenleagh Power DAC €1.8 million (2015: €nil), SIRO Limited €1.9 million (2015: €nil) and Kingspan ESB Limited €nil million (2015: €0.9 million).

Capital funding of €1.4 million (2015: €1.8 million) was advanced to Raheenleagh Power DAC, €2.5 million (2015: €nil) to Terra Solar Limited and €nil (2015: €2.9 million) to Tilbury Green Power Holdings Limited. No capital was advanced during the year to SIRO Limited.

The Group was owed €60.7 million from equity accounted investees at 31 December 2016, being €3.8 million (2015: €3.8 million) from Raheenleagh Power DAC, €6.9 million (2015: €1.8 million) from Oweninny Power DAC, €38.4 million (2015: €44.8 million) from Tilbury Green Power Holdings Limited, €4.4 million (2015: €nil) from Emerald Bridge Fibres DAC, €6.9 million (2015: €nil) from Castlepook Power DAC and €0.3 million (2015: €nil) from Kingspan ESB Limited.

Interest on borrowings receivable from Emerald Bridge Fibres DAC amounted to €0.7 million for 2016 (2015: €0.4 million), Oweninny Power DAC €nil (2015: €0.4 million) and Tilbury Green Power Holdings Limited €8.4 million (2015: €nil). These amounts are included above within amounts owed from equity accounted investees.

ESB has committed to provide capital funding to SIRO Limited amounting to €85.0 million over the next 5 years.

Key management compensation	2016 € '000	2015 € '000
Salaries and other short-term employee benefits	2,567	2,506
Post-employment benefits	374	359
	2,941	2,865

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 Board members and senior executives.

NOTES TO THE FINANCIAL STATEMENTS

29. ESTIMATES AND JUDGEMENTS

The preparation of Parent 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.

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 21).

(b) The value in use, in accordance with IAS 36 Impairment of Assets, of long lived assets and associated goodwill, as described in note 12 and as described below.

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 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. These cash flows 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.

(c) As described in note 26 section (h), 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.

(d) Future costs required to settle current provisions and employee related liabilities, such as the power station closure costs and voluntary severance obligations. These liabilities are disclosed in notes 21, 22 and 25.

(e) 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, 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 International Financial Reporting Standards.

(f) ESB provide services to around 1.4 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 15).

(g) For other disclosures, please refer to note 27 for further details of estimates and judgements regarding ongoing legal claims.

30. 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 the Company. 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 2015 ESB entered into an agreement to support the acquisition of capital stock in future ESOP internal markets. As part of the agreement ESB committed to match the acquisitions made by the ESOP Trustees up to a value of €25 million. The acquisition of this stock by ESB will not commence until 2017. An ESOP repurchase provision of €7.0 million (2015: €12.1 million) was recognised in the 2016 financial statements in relation to the capital stock repurchase by the ESOP Trustee.

31. POST BALANCE SHEET EVENTS

On 31 January 2017, ESB successfully raised a €500 million, 1.750% fixed rate Eurobond maturing in February 2029.

32. APPROVAL OF FINANCIAL STATEMENTS

The Board approved the financial statements on 22 February 2017.

NOTES TO THE FINANCIAL STATEMENTS

33. SUBSIDIARY, JOINT VENTURE 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 Electric Ireland Ltd. (UK)	4	100	Electricity sales
ESB Finance DAC	2	100	Finance
ESB Financial Enterprises Ltd.	2	100	Holding company
ESB International Investments Ltd.	2	100	International investments
ESB International Ltd.	2	100	Holding company
ESB Networks DAC	8	100	Power distribution
ESBNI Ltd.	5	100	Holding company
Indirect subsidiary			
Airstream Wind Energy Ltd.	2	100	Power generation
Airvolution Energy (Agney Farm) Ltd.	7	90	Power generation
Airvolution Energy (Airfield) Ltd.	7	90	Power generation
Airvolution Energy (Biglis Farm) Ltd.	7	90	Power generation
Airvolution Energy (Blakemore) Ltd.	7	90	Power generation
Airvolution Energy (Car Ban Wind Farm) Ltd.	7	90	Power generation
Airvolution Energy (Church House Farm) Ltd.	7	90	Power generation
Airvolution Energy (Grimoldby) Ltd.	7	90	Power generation
Airvolution Energy (Hafod-Y-Dafal) Ltd.	7	90	Power generation
Airvolution Energy (Hartwood Hill) Ltd.	7	90	Power generation
Airvolution Energy (Junction 2A) Ltd.	7	90	Power generation
Airvolution Energy (Kinegar) Ltd.	7	90	Power generation
Airvolution Energy (Lancarr) Ltd.	7	90	Power generation
Airvolution Energy (Middle Balbeggie) Ltd.	7	90	Power generation
Airvolution Energy (Muircleugh) Ltd.	7	90	Power generation
Airvolution Energy (Plas Bodewryd) Ltd.	7	90	Power generation
Airvolution Energy (Rawcliffe Bridge) Ltd.	7	90	Power generation
Airvolution Energy (RGM) Ltd.	7	90	Power generation
Airvolution Energy (Roseland) Ltd.	7	90	Power generation
Airvolution Energy (Scottow) Ltd.	7	90	Power generation
Airvolution Energy (Shotts 2) Ltd.	7	90	Power generation
Airvolution Energy (Shotts) Ltd.	7	90	Power generation
Airvolution Energy (Tarvie) Ltd.	7	90	Power generation
Airvolution Energy (Washpit Drove) Ltd.	7	90	Power generation
Airvolution Energy (West Scales) Ltd.	7	90	Power generation
Airvolution Energy (Wilton) Ltd.	7	90	Power generation
Airvolution Energy Ltd. (UK)	7	90	Power generation
Aveillant Ltd.	19	41.5	Clean technology investment
Blarghour Wind Farm Ltd.	9	8	Power generation
Cambrian Renewable Energy Ltd.	4	100	Power generation
Capital Pensions Management Ltd.	6	100	Pension scheme administration
Cappawhite Wind Ltd.	2	100	Power generation

NOTES TO THE FINANCIAL STATEMENTS

33. SUBSIDIARY, JOINT VENTURE AND ASSOCIATE UNDERTAKINGS (continued)

Company name	Registered office	Group share %	Nature of business
Indirect subsidiary (continued)			
Carrington Power Ltd.	4	100	Power generation
Chirmorie Wind Farm Ltd.	9	8	Power generation
Coolkeeragh ESB Ltd.	5	100	Power generation
Corby Power Ltd.	3	100	Power generation
Corvoderry Wind Farm Ltd.	2	100	Power generation
Crockagarran Windfarm Ltd.	5	100	Power generation
Crockahenny Wind Farm DAC	1	75	Power generation
Crockdun Windfarm (NI) Ltd.	5	100	Power generation
Curryfree Wind Farm Ltd.	5	100	Power generation
Cylon Controls Ltd.	20	36	Clean technology investment
Devon Wind Power Ltd.	4	100	Power generation
Dell Wind Farm Ltd.	9	8	Power generation
EC02 Cambrian Ltd.	4	100	Power generation
Electric Ireland Ltd. (UK)	4	100	Electricity sales
Electricity Supply Board Services B.V.	12	100	Facility management
Endeco Technologies Ltd.	21	22	Clean technology investment
ESB 1927 Ltd.	2	100	Property management
ESB Asset Development (UK) Ltd.	4	100	Power generation
ESB Commercial Properties Ltd.	2	100	Property management
ESB Electric Ireland Ltd.	4	100	Electricity sales
ESB Independent Energy (NI) Ltd.	2	100	Electricity sales
ESB Independent Energy Ltd.	2	100	Electricity sales
ESB Independent Generation Trading Ltd.	2	100	Electricity and gas trading
ESB Novus Modus GP Ltd.	2	100	Clean technology investment
ESB Power Generation Holding Company Ltd.	2	100	Holding company
ESB Services BV (Holland).	12	100	Operation and maintenance
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	Power generation
ESB Wind Development Ltd.	2	100	Power generation
ESBI Carbon Solutions Ltd.	2	100	Carbon emission reduction
ESBI Computing Ltd.	2	100	Computer services
ESBI Consultants Ltd.	1	100	Consultancy
ESBI Contracting Ltd.	2	100	Contracting
ESBI Eng & FM (Botswana) (Proprietary) Ltd.	11	100	Engineering & Consultancy
ESBI Engineering and Facility Management Ltd.	1	100	Engineering
ESBI UK Ltd.	4	100	Holding company
ESBI Luxembourg S.A.	32	100	Electricity generating assets development
Facility Management UK Ltd.	4	100	Facility management
Garvagh Globe Power Ltd.	2	100	Power generation
Geothermal International Ltd	10	84.68	Power generation
Geothermal International Sp Zoo (Spolka Z Organizczona Odpowiedzialnoscia)	30	89	Power generation
GI Holdings North America Inc.	26	100	Power generation
Glendye Wind Farm Ltd.	9	8	Power generation

NOTES TO THE FINANCIAL STATEMENTS

33. SUBSIDIARY, JOINT VENTURE AND ASSOCIATE UNDERTAKINGS (continued)

Company name	Registered office	Group share %	Nature of business
Indirect subsidiary (continued)			
Gort Windfarms Ltd.	2	100	Power generation
Heliex Power Ltd.	22	35.8	Clean technology investment
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
Kirk Hill Wind Farm Ltd.	9	8	Power generation
Knottingly Power Ltd.	4	100	Power generation
Lower Wind Farm Ltd.	9	8	Power generation
Mount Eagle Wind Farm Ltd.	2	100	Power generation
Mountainlodge Power DAC	2	85.9	Power generation
NIE Finance PLC.	6	100	Finance
NIE Network Services Ltd.	6	100	Infrastructure contracting
Northern Ireland Electricity Ltd.	6	100	Dormant
Northern Ireland Electricity Networks Ltd.	6	100	Power transmission and distribution
Nualight Ltd.	23	38	Clean technology investment
Orliven Ltd.	2	100	Power generation
Planet 9 Energy Ltd.	4	100	Power generation
Power Generation	21	100	Power generation
Silahertane Energy Project Two Ltd.	2	100	Power generation
Synergen Power Ltd.	14	100	Power generation
Power Generation Technology Snd. Bhd.	18	100	Power generation
Tullynahaw Power Ltd.	2	100	Power generation
Turnalt Wind Farm Ltd.	9	8	Power generation
Utility Operation & Maintenance Services Ltd.	14	100	Operation and maintenance services
Waterfern Ltd.	2	100	Power generation
West Durham Wind Farm (Holdings) 2 Ltd.	4	100	Power generation
West Durham Wind Farm (Holdings) Ltd.	4	100	Power generation
West Durham Wind Farm Ltd.	4	100	Power generation
Woodhouse Wind Farm Ltd.	2	100	Power generation
Non-controlled subsidiary undertaking			
ESB ESOP Trustee Ltd.	15	100	Staff shareholding scheme
Equity accounted investees			
Castlepook Power DAC	2	50	Power generation
Emerald Bridge Fibres DAC	2	50	Telecommunications
Geothermal International Magyarszay Korlatoit Felelossegu Tarsasag	28	40	Power generation
Kingspan ESB DAC	2	50	Business and management consultancy activities
Oweninny Power DAC	2	50	Power generation
Raheenleagh Power DAC	2	50	Power generation
SIRO Ltd.	2	50	Fibre to the building
Tilbury Green Power Holdings Ltd.	4	47	Power generation
Tilbury Green Power Ltd.	4	47	Power generation
UNES Operation and Maintenance Inc.	16	50	Operation and maintenance services

NOTES TO THE FINANCIAL STATEMENTS

33. SUBSIDIARY, JOINT VENTURE AND ASSOCIATE UNDERTAKINGS (continued)

Company name	Registered office	Group share %	Nature of business
Associate undertakings			
Aviation Investment Fund Co. Ltd.	7	0.206	Power generation
Geothermal International Hsvatska (Croatia) d.o.o.	31	10	Power generation
Geothermal International Italia SRL	29	20	Power generation
Pesaka Technologies.	17	30	Power generation
Rousch Pakistan Power	13	7	Power generation
TenKsolar Inc.	25	18.56	Clean technology investment
Terra Solar Ltd.	27	25	Power generation
Vantagepoint Cleantech Partners II, L.P.	24	4.5	Clean technology investment

ESB's principal place of business is Two Gateway, East Wall Road, Dublin 3, D03 A995

Notes:

- 1 ESB International, One, Dublin Airport Central, Dublin Airport, Cloghran, Co. Dublin
- 2 Two Gateway, East Wall Road, Dublin 3, D03 A995
- 3 Mitchell Road, Phoenix Parkway, Corby, Northamptonshire, N17 1Q7
- 4 Tricor Services Europe LLP, 4th Floor, 50 Mark Lane, London, EC3R 7QR
- 5 2 Electra Road, Maydown, Derry BT47 6UL
- 6 120 Malone Road Belfast BT9 5HT
- 7 Palladium House, 1-4 Argyll Street, London, W1F 7TA
- 8 Clanwilliam House, Clanwilliam Place, Dublin 2
- 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 Lumpar, 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 43 Merrion Square, Dublin 2
- 16 Nispetiye Cad Akmerkez E3 Blok K, 13Etiler/Beskiktas, Turkey
- 17 Level 1, Menara Yavasan, Tun Razak, Zoo, Jalan Bukit Bintang, 55100 Kuala Lumper, Malaysia
- 18 10th Floor, Wisma Havela, Thakardos, No 1 Jalan Raja Laut, 50350 Kuala Lumper,Malaysia
- 19 C/O Staffords Cpc1 Capital Park, Fulbourn, Cambridge, United Kingdom, CB21 5XE
- 20 Clonshaugh Business and Technology Park, Clonshaugh, Dublin17
- 21 3015, Lake Drive, Citywest Business Park, Dublin 24
- 22 Kelvin Building Bramah Avenue, East Kilbride, Glasgow, G75 0RD
- 23 Cork Business and Technology Park, Model Farm Road, Cork
- 24 c/o Codan Trust Company (Cayman) Limited, Crickett Square, Hutchins Drive, P.O Box 2681, Grand Cayman, KY1-1111, Cayman Islands
- 25 9231 Penn Avenue South, Minneapolis, Minnesota, 55431
- 26 134 N LaSalle St, Suite 510, Chicago, IL 60602
- 27 57 Hollybank Avenue Lower, Ranelagh, Dublin 6
- 28 H-1015 Budapest, Batthyány utca 56, Hungary
- 29 Trezzano Sul Naviglio- Viale C.Colombo, 8
- 30 Geothermal International Polska, Parkova 21 lok 7, 00-759 Warszawa, Poland
- 31 ZagrebaCka 94, 42000 VaraZdin
- 32 6, Rue Eugene Ruppert, L-2453 Luxembourg

Report of Board Members on Compliance with the Prompt Payment of Accounts Act, 1997 and European Communities (Late Payments in Commercial Transactions) Regulations, 2002 (S.I. No. 388 of 2002)

Introduction

- Payment terms during 2016 were governed by three items of legislation:
- The Prompt Payment of Accounts Act, 1997.
 - European Communities (Late Payments in Commercial Transactions) Regulations, 2002 (S.I. No. 388 of 2002) 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, with an aim to provide clarity on payment due dates and remedies for non-compliance.

Statement of payment practices including standard payment periods

ESB operates a policy of paying all undisputed supplier invoices within the agreed terms of payment. The standard terms specified in the standard purchase order are net monthly. Other payment terms may apply in cases where a separate contract is agreed with the supplier.

Compliance with the legislation

ESB complies with the requirements of the legislation in respect of external supplier payments within the EU in all material respects.

Procedures and controls in place

Appropriate internal financial controls have been implemented including clearly defined roles and responsibilities. These procedures provide reasonable but not absolute assurance against material non-compliance with the legislation.

Prompt Payment Code of Conduct

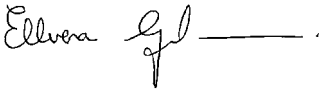
In 2015 the Government launched the Prompt Payment Code of Conduct, which can be found at www.promptpayment.ie. ESB are signatories to this code and undertake to pay suppliers on time, give clear guidance to suppliers on payment procedures and encourage the adoption of the Code by suppliers within their own supply chains.

Construction Contracts Act 2013

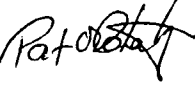
This act's commencement date was 25 July 2016. ESB have reviewed their responsibilities under this act and have communicated these responsibilities to effected staff.

Details of interest payments in respect of 2016

When ESB validate a request from the supplier, it is ESB's policy to pay interest due on late payments. No such payments were made in respect of late payments during the year 2016 (2015: €nil).



Ellvena Graham,
Chairman



Pat O'Doherty,
Chief Executive

22 February 2017

GLOSSARY

1. British Electricity Trading and Transmission Arrangements (BETTA)

British Electricity Trading and Transmission Arrangements (BETTA) is the wholesale electricity market operating in Great Britain (GB).

2. Big Energy Hack

The goal of the Big Energy Hack is to discover and explore innovative customer solutions for a low-carbon future.

3. Brexit

Brexit is the potential departure of the United Kingdom (UK) from the European Union (EU).

4. Business in the Community (BIC)

Business in the Community works with the largest companies in Ireland to help them develop, manage and measure their corporate social responsibility (CSR) and sustainability strategies.

5. Commission for Energy Regulation (CER)

The Commission for Energy Regulation (CER) is the independent regulator of the energy market in the Republic of Ireland.

6. 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.

7. COP21

Countries who have signed up to the 1993 United Nations Framework Convention on Climate Change.

8. EBITDA

Earnings before interest, taxation, depreciation, amortisation and exceptional items.

9. Electricity Market Reform (EMR)

Electricity Market Reform (EMR) is a UK government policy to incentivise investment in secure, low-carbon electricity, improve the security of Great Britain's electricity supply, and improve affordability for consumers.

10. Energy for Generations Fund

In November 2013, ESB launched the Energy for Generations Fund, a corporate responsibility investment which will see over €2 million per year disbursed across a range of community and issues-based initiatives.

11. 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.

12. Gigabit (Gb/s)

Gigabit (Gb/s) is a unit of data transfer rate equal to 1,000 megabits per second.

13. Gigawatt (GW)

Gigawatt, being the amount of power equal to 1 billion watts.

14. Gigawatt Hours (GWh)

Gigawatt hours, being the amount of energy equivalent to delivering 1 billion watts of power for a period of one hour.

15. Great Britain (GB)

England, Wales and Scotland.

16. Honeywell Evohome

Honeywell Evohome is a wireless multizone heating and hot water control system that will help the user to be smarter about how they heat their home. Honeywell allows the user to remotely control heating and hot water from a smartphone.

17. Impairment

An impairment charge is determined when the carrying value (book value) of assets exceeds its recoverable amount.

18. 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.

19. Joint Venture

A company or other entity which is controlled jointly with other parties.

20. Liquefied Natural Gas (LNG)

Liquefied natural gas, a clear, colourless, non-toxic liquid that forms when natural gas is cooled to -162°C (-260°F).

21. 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.

22. Megawatt (MW)

Megawatt, being the amount of power equal to 1 million watts.

23. Megawatt Hours (MWh)

Megawatt hours, being the amount of energy equivalent to delivering 1 million watts of power for a period of one hour.

24. 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.

26.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.

27. PAS 55

PAS 55 is the British Standards Institution (BSI) publically available specification for the optimised management of physical assets. It provides clear definitions and requirements specification for establishing and verifying a joined-up, optimised and whole-life management system for all types of physical assets.

28. Pay As You Go

Pay As You Go products allow users to control electricity usage and track usage from a monitor to enable them to know how much they are spending on electricity at all times.

29. Price Review 4 (PR4)

Regulatory periods are of 5 years' duration and the Price Control Review (PR4) covers the period 2016 to 2020 and sets out the total regulated allowed revenues over that period as determined by the Commission Energy Regulation.

30. Prosumer

A consumer who becomes involved with designing or customizing products for their own needs.

31. Regulatory Period 5 (RP5)

Regulatory Period 5 (RP5), is a regulatory period of 5 years' duration for price control, covering the period 1 April 2012 to 30 September 2017, determined by the Utility Regulator in Northern Ireland.

32. Regulatory Period 6 (RP6)

Regulatory Period 6 (RP6), is a regulatory period for price control, covering the period 1 October 2017 to 31 March 2024, determined by the Utility Regulator in Northern Ireland.

33. Return on Capital Employed (ROCE)

The return on capital employed shows the overall return on capital provided by both debt and equity.

34. Single Electricity Market (SEM)

The Single Electricity Market is a wholesale pool-based electricity market operating north and south of the Irish Border.

GLOSSARY

35. 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.

36. SIRO

A joint venture with Vodafone, which will bring 1 gigabit per second (Gb/s) broadband to 500,000 customers in fifty towns across Ireland using the existing distribution network.

37. 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 a business.

38. 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.

39. 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.

40. 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.

41. Spark Spread

The difference between the price of a unit of electricity and the cost of the gas used to generate it.

42. Start-up costs

Start-up costs are costs a generator faces if it needs to be turned on after a period of inactivity.

43. Stay Safe, Stay Clear

The core objective of the campaign is to educate people to be mindful of electricity wires while they are outdoors and to always stay safe and stay clear of electricity wires.

44. 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.

45. 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.

46. System Marginal Price (SMP)

The wholesale price of electricity for each half hour period.

47. United Kingdom (UK)

England, Wales, Scotland and Northern Ireland.

48. 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.

49. Vertically Integrated Utility

The Vertically Integrated Utility (VIU) refers to ESB's 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.

50. X_Site

ESB's first innovation hub, X_Site is a place where new business ideas and start-ups are incubated.

Notes

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