



Energy for generations

SUSTAINABILITY REPORT 2013



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We welcome requests and comments relating to the report and other sustainability matters via our contact mailbox: sustainability@esb.ie or by contacting our Sustainability Coordinator: brian.gray@esb.ie

Follow us on Twitter: [@ESBGroup](https://twitter.com/ESBGroup)

www.esb.ie



ABOUT THIS REPORT

This report is aimed at customers, investors, analysts, governments, other stakeholders and interested members of the public and focuses on the sustainability issues of greatest concern to our stakeholders and our business.

Our reporting is guided by the principles of materiality, inclusiveness and responsiveness. We use leading standards and methodologies for measuring and reporting impacts, such as the Greenhouse Gas Protocol and the Global Reporting Initiative (GRI). Further details on GRI indicators are available in the report appendices.

This report has been independently reviewed by DNV GL and contains the required set and number of disclosures for Application Level C in accordance with the GRI G3.1 requirements.

SCOPE OF REPORT

This report includes data for the fiscal and calendar year 2013, pertaining to the full activities of ESB, and its subsidiary companies, including NIE, hereinafter referred to as ESB Group. Section 2 details ESB Group businesses and their activities.

The 2013 Sustainability Report meets the commitment made to stakeholders in 2009 to report annually on our Sustainability endeavours.

[The 2012 Sustainability Report can be viewed here.](#)

The report content gives consideration to the output from both operational and strategic engagements with internal and external stakeholders, takes account of significant economic, environmental and social impacts of our operations and seeks to address the issues of greatest material importance to our stakeholders and to ESB, thus enabling stakeholders to assess our performance in 2013.

Where data is available, we endeavour to report comparative data for the reporting year and the previous 4 years, to reflect trends within our performance.

Report disclosures are made for ESB Group's operating activity according to the requirements of GRI 3.1.

The Sustainability Report 2013 is closely aligned to the ESB Annual Report 2013 and together they provide a coherent picture of ESB Group activity, how we are embedding sustainability and how sustainability supports our corporate strategy.



01

**2013 HIGHLIGHTS AND
EXECUTIVE SUMMARY**

2013 PERFORMANCE HIGHLIGHTS

- 01 EXECUTIVE SUMMARY
- 02 SUSTAINABILITY IN ESB
- 03 HEALTH, SAFETY & WELLBEING
- 04 OUR PEOPLE
- 05 ENVIRONMENT AND CLIMATE CHANGE
- 06 SOCIAL
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- 08 ECONOMIC PERFORMANCE
- 09 APPENDICES

EMISSIONS

- CO₂ reduced by 1.5 million tonnes from 2012 to 2013
- Equivalent of removing 315,000 cars from the road
- Since 2006 Baseline NO_x down 62% and SO_x down 68%



SEE SECTION 53

RENEWABLES

- 1.4 TWh of electricity generated from renewable sources in 2013
- That's enough power to provide 280,000 homes with electricity for the year



SEE SECTION 24

FLEET FUEL

- Consumption reduced by 3.9% (over 190,000 litres) in 2013
- That's the equivalent of removing 94 passenger vehicles from the road.



SEE SECTION 57

NETWORK UPGRADES

- 2,579kms converted from 10kV to 20kV in 2013
- Each km of overhead line converted saves on average 5,000 kWh per annum



SEE SECTION 24

HEALTH & SAFETY

- 67% reduction in staff lost time injuries in the past 10 years.
- 1 staff fatality in 2013 which was felt deeply throughout ESB, and reinforced our focus on safety as a core value.



SEE SECTION 34

ELECTRIC TRANSPORT

- Over 1,300 charge points installed across Ireland
- The Great Electric Drive 2013 saw 21 ambassadors drive 105,000kms driven with zero CO₂ tailpipe emissions



SEE SECTION 58

WASTE AND RECYCLING

- Total recycling rate of 93.3% across our business activities in 2013
- We work closely with waste service providers to reduce, reuse and recycle materials.



SEE SECTION 5.6

PHILANTHROPY

- Energy for Generations Fund launched committing €2 million per year across a range of community and issues based initiatives.



SEE SECTION 6.1

OUR PEOPLE

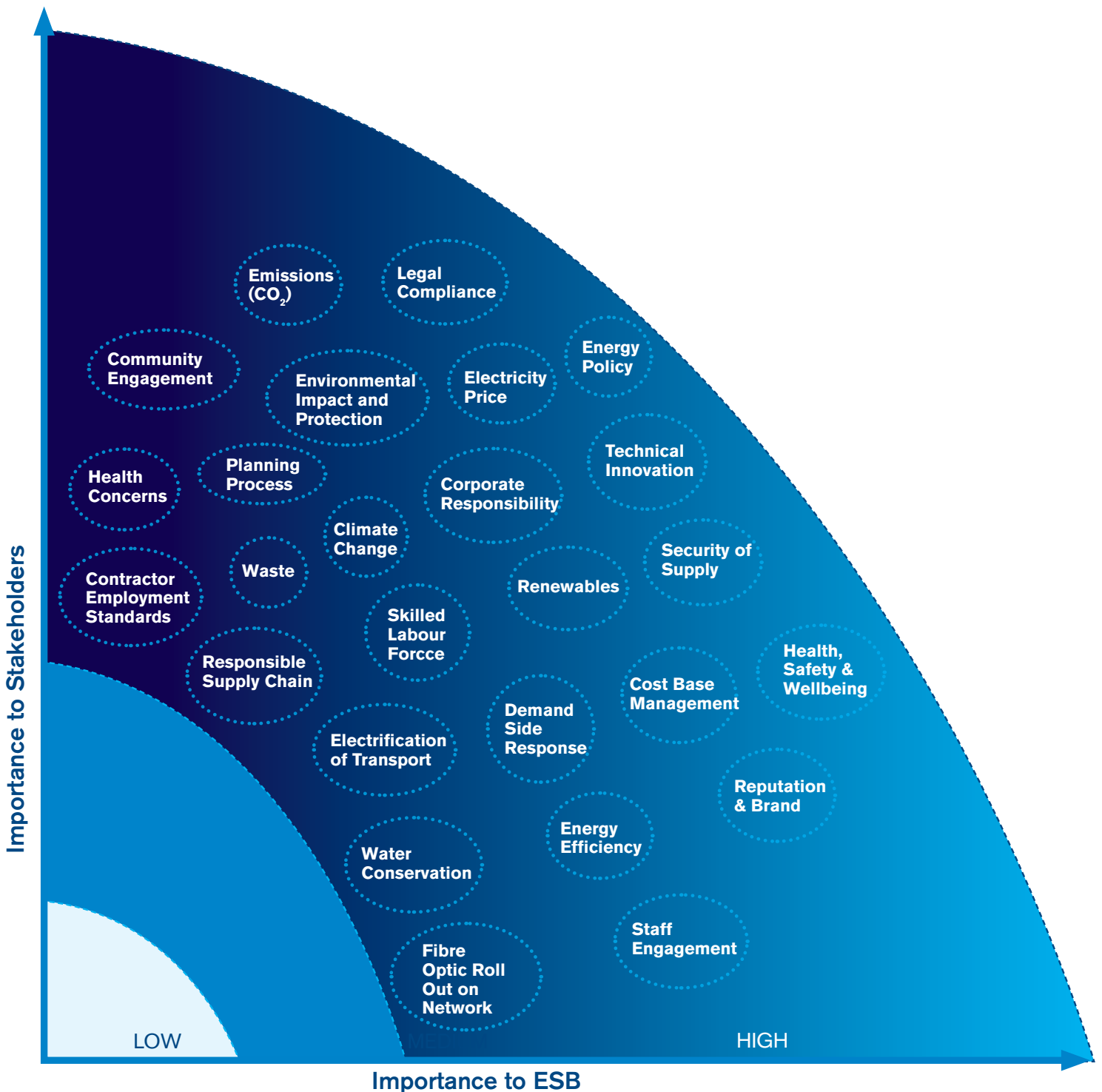
- 33,850 training interventions were delivered as part of staff development during 2013.
- Our staff are central to our success, now and into the future



SEE SECTION 4.5

MATERIALITY MATRIX

Following a strategic and operational stakeholder engagement process, the most material issues to both our stakeholders and ESB are captured below. Through the content of this report we seek to address our activity, progress and challenges in these areas of materiality.



WELCOME FROM CHIEF EXECUTIVE

WELCOME

Welcome to our 2013 Sustainability Report which is our fifth annual sustainability report. The scope of sustainability as a concept has extended from a relatively narrow focus on environmental issues to a broader approach integrating economic, social, environment and governance requirements within the sustainable development framework. Since our first Corporate Social Responsibility report was published in 2003, ESB has progressed and developed in all areas of sustainability and has sought to ensure that the key elements of our sustainability strategy are embedded within our business model in all aspects of our business operations as a key business driver for ESB.

A key part of our Corporate Strategy to 2025 is to leverage knowledge within ESB to advance the low carbon agenda through sustainable innovations. Our sustainability strategy supports our corporate strategy, and reflects our determination to build a successful business in the long-term as we move to decarbonise our generation activities by 2050. In 2013 we launched our new Sustainability Strategy based on 24 key objectives in support of our overall Corporate Strategy. The new strategy builds on the many successes of the 2008 Sustainability Programme with a strong emphasis on maintaining the huge enthusiasm and high level of engagement that staff have for working in a sustainable manner.

KEY ASPECTS OF OUR PERFORMANCE IN 2013

One of the many highlights in 2013 was ESB's re-accreditation to the Business Working Responsibly (BWR) award which ESB first achieved in 2011. The BWR Mark is an independently verified assessment of company sustainability and corporate responsibility performance. This external validation of our performance highlights the efforts by people throughout ESB who are making real changes, working more efficiently and really thinking through how they can contribute to a sustainable future for our company, our customers and the communities in which we operate. During 2013 we were also selected as a National Champion at



Chief Executive, Pat O'Doherty, pictured with Germaine Noonan (Business in the Community Ireland) and school children from St. Patrick's GNS, Ringsend, at the launch of the Time to Read programme.

the European Business Awards in the category of Environmental and Corporate Sustainability, which recognise excellence, best practice and innovation in companies across the EU.

2013 was the first full year of implementation of our Corporate Strategy to 2025. The strategy provides a guiding framework for ESB to optimise growth and manage risk as we move towards a low carbon future in an increasingly interconnected EU energy market. In line with the strategy, our core focus in 2013 was on the delivery of sustainable and competitive energy solutions to our customers in the integrated Irish/British market. Despite continuing economic challenges and increased competitive pressures, we made strong progress in achieving our objectives across all areas of our business.

SAFETY, HEALTH AND WELLBEING

Safety remains our core value and throughout 2013, we continued to invest in the structures, supports and culture necessary to protect the safety of our staff, colleagues and members of the

Our sustainability strategy supports our corporate strategy, and reflects our determination to build a successful business in the long-term as we move to decarbonise our generation activities.

KEY HIGHLIGHTS IN 2013 INCLUDE:

- Operating profit for the Group increased to €780 million (2012: €415 million). The results include an exceptional item (€95 million) relating to the sale of ESB's 50% share in Marchwood Power Limited (UK).
- Investment of €825m in capital projects in the Republic of Ireland and the UK.
- Commencement of a sales process for ESB shareholding in Bizkaia Energia SL (also CCGT) (Spain). This divestment was completed in May 2014.
- Commissioning of two new wind farms at Mynydd y Betws (35MW) in Wales and Carrickatane (21MW) in Northern Ireland.
- Construction commenced on Woodhouse (20MW) wind farm in Co. Waterford.
- Construction works at Carrington Power Station, ESB's new 881MW CCGT near Manchester in the UK, progressed well in 2013 and the plant is on track for commercial operation in early 2016.
- Investment in energy infrastructure in upgrading and developing the Irish electricity network to meet demand and facilitate the integration of new renewable generation.
- Connection of 541MW of renewable generation to the electricity networks in 2013.
- Exemplary performance by ESB Networks and NIE during winter storms demonstrating our commitment to our customers.
- Continued profitable customer growth in our supply business Electric Ireland
- On-going collaborating with technology and academic partners, including Vodafone, IBM, Intel and EPRI (Electricity Power Research Institute) on a number of cross industry initiatives in areas such as high-speed broadband services, smart grids, electric vehicles and emerging generation technologies.

to staff and contractors from a high of over 300 staff LTIs in 1997 to 29 staff LTI in 2013. Despite this strong progress, there was an increase in the overall number of staff and contractor LTIs in 2013 (43) compared to 2012 (37). All of our Lost Time Injuries were of low severity with the most prevalent causes continuing to be slips and trips, handling and lifting and tools and equipment.

ENVIRONMENT AND CLIMATE CHANGE

Our generating station CO₂ emissions in 2013 reduced to 9.3 million tonnes, a reduction of 1.5 million tonnes on 2012. The carbon intensity of our generation activity for 2013 was 578g/kWh a reduction of 34g/kWh on 2012. In 2013 we reduced our fleet CO₂ emissions by 5.6%, CO₂ emissions from car travel by 3.3% and reduced electricity consumption in our buildings by 2.3%. Despite an increase in national kg CO₂/kWh conversion factors, our internal CO₂ footprint reduced by 36 tonnes in 2013. In 2013, ESB Group delivered an overall waste recycling rate of 93.3%. Electric Ireland's energy reduction targets under the Better Energy scheme delivered 220GWh of energy efficiencies for the 2011/13 period and were submitted to Sustainable Energy Authority of Ireland for final verification.

SOCIAL

ESB continues to play an important role in the Irish economy and deliver benefits to its stakeholders. In 2013, ESB directly contributed over €2bn to the Irish economy through dividends, investments, taxes and jobs. ESB provides significant employment both directly, with 7,500 employees, and indirectly through contractors and service providers.

A key highlight during 2013 was the launch of ESB's new 'Energy for Generations' corporate responsibility fund which will see over €2 million disbursed annually across a range of community and issues-based initiatives. Approximately €1 million per year will be dedicated to addressing issues relating to education, homelessness and suicide prevention building on the work already undertaken by ElectricAid Ireland. A new feature of the Energy for Generations fund is the focus on education and in 2013 ESB entered into a

public. Tragically, two of our colleagues lost their lives in 2013. Shane Conlan died while working at Finglas 38kV substation and Oisín Crotty died in a car accident while travelling to work. These tragedies were felt deeply throughout ESB, and reinforced our focus on safety as a core value across all areas of our business. A full internal investigation was carried out into the death of Shane Conlan and a new organisational structure has been put in place to bring a sustained focus to implementing the recommendations arising from it. Electricity and driving continue to be the main risks facing ESB and we continue to focus on these and other risk areas on our journey towards a zero harm environment.

Over the last 15 years, ESB has worked hard to reduce the number of Lost-Time Injuries (LTI)

national educational partnership with Business in the Community Ireland (BITC) on the Time to Read programme, a national literacy support programme, where staff volunteers commit to one-to-one reading with children in national schools. In addition, ESB entered into a national partnership with An Cosan, Ireland's leading provider of adult and community education.

Electric Ireland supported the fifth year of Pieta House's (a suicide and self-harm crisis centre) Darkness Into Light fundraising walk. Powering Kindness Week, which is an initiative that encourages people to do a simple act of kindness and bank it in favour of one of three Irish charities, to help them share in Electric Ireland's €130,000 fund. Electric Ireland also sponsors the GAA Football/Hurling All-Ireland Minor Championships.

GOVERNANCE

Good governance is essential to the sustainable growth of our business. ESB is committed to the highest standards of corporate governance, and transparency and accountability are at the heart of this commitment. ESB has put in place the appropriate measures to comply with the Code of Practice for the Governance of State Bodies, updated in 2009. The Code sets out the governance framework agreed by Government for the internal management and the internal and external reporting relationships, of commercial and non-commercial State bodies. ESB continuously reviews and updates its policies and procedures to ensure compliance with the Code and best practice in corporate governance. ESB also conforms as far as possible, and on a voluntary basis, to the UK Corporate Governance Code. Our compliance on a voluntary basis with the Corporate Governance Code demonstrates our commitment to the highest standards of governance and corporate behaviour.

ECONOMIC PERFORMANCE

In 2013, ESB achieved a return on capital employed of 7.5 per cent. This is in line with other European utilities and ensures that ESB can not only continue to invest in important national infrastructure, but can also offer the best customer solutions.

ESB paid an interim dividend of €68.4million and also a special dividend of €161m in January 2014 out of proceeds from the sale of overseas generation assets in 2013. The Board recommended a final dividend payment of €28.8m, bringing total dividends for 2013 to €258m and to €1.2billion over the past ten years.

In 2013, we continued to drive down operating costs under our Performance Improvement Programme. To date we have secured recurring annual savings of over €250 million. This has been a challenging process and I would like to acknowledge the contribution of staff in the ongoing implementation of the 2011- 2015 Payroll Cost Base Reduction Agreement, which will deliver a €140 million or 20% reduction on our 2010 payroll bill (excluding NIE). We are on track to meet our target to reduce costs by €280 million by 2015, including €200 million in cumulative payroll savings since 2009.

OUR PEOPLE

Strong staff engagement is a key part of our sustainability strategy. One of the highlights of our sustainability calendar is our Annual Sustainability Awards held in December 2013 which encouraged video entries from staff highlighting the embedding of sustainability across ESB. I was delighted that 36 video entries from across the business were received showcasing the embedded nature of sustainability in ESB. The overall winner was Ardnacrusha Generation Station.

The industrial relations pensions dispute that emerged in 2013 posed a serious business risk to ESB, its customers and the Irish economy. With the assistance of the Labour Relations Commission and working with ESB unions, industrial action was averted. ESB regrets the uncertainty and concern that this dispute caused for all our stakeholders and customers.

OUTLOOK

Although some signs of economic stability emerged during 2013, trading conditions remain difficult. Increasing interconnection with Britain,

the construction of new generating plant by competitors in Ireland and the arrival of new players into the supply market are contributing to increased competitive pressures. I am pleased to report that ESB Group continues to respond effectively to these challenges.

In the medium term, we will continue to drive the implementation of our Corporate Strategy to 2025 in order to deliver sustainable and competitive products and services to meet changing customer needs in the integrated Irish British energy market.

As we look ahead, we will continue to focus on safety, cost reduction, maintaining the financial strength of ESB and the delivery of sustainable and competitive energy solutions to our customers and stakeholders. Increasingly, we are moving from being a large player in a small market to being a small but important player in a much larger market. To compete successfully and ensure the sustainability of our business, we need an engaged and agile workforce, committed to the future of ESB.

CONCLUSION

Sustainability performance in ESB remains deeply rooted in our overall business strategy. For 2014 we plan to further assess key issues and identify links to add value to our businesses and so enhance our overall sustainability performance. I would like to acknowledge the dedication and efforts of everyone in ESB Group who continue to demonstrate full commitment to developing our performance and have enabled our many achievements in this area. We welcome feedback from all our stakeholders and we will continue to keep you informed of our sustainability progress.



Pat O'Doherty, Chief Executive



02 SUSTAINABILITY IN ESB

ABOUT ESB

2.1 OVERVIEW

ESB was established in 1927 as a corporate 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 an Employee Share Ownership Trust. As a strong, diversified, vertically integrated utility, ESB operates right across the electricity market: from generation, through transmission and distribution to supply. In addition, we extract further value at certain points along this chain: supplying gas, using our networks to carry fibre for telecommunications and more. With a regulated asset base (RAB) of approximately €8.5 billion, 42% of total electricity generation capacity in the all-island market and supplier of electricity to approximately 1.5 million customers throughout the island of Ireland, we are a leading Irish utility focussed on maintaining our financial strength and customer service. As at 31 December 2013, ESB Group employed approximately 7,490 people.

ESB's main operations are in the Single Electricity Market (SEM), the single wholesale market pool for electricity in the Republic of Ireland (ROI) and Northern Ireland (NI).

Sustainability is the way in which ESB addresses the challenge of a low carbon future. It is embedded and integrated within the business to support ESB strategy, taking account of the economic, social and environmental aspects of our activities. It contributes towards our commercial success and is aligned with our mission, vision and values.

FOR A FULL OVERVIEW OF ESB'S OPERATING ENVIRONMENT, [PLEASE CLICK HERE](#)

2.2 OUR APPROACH TO SUSTAINABILITY

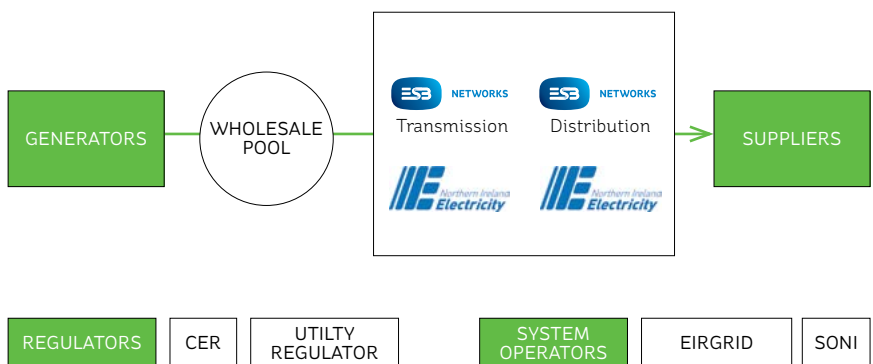
2013 was a year of transition for our sustainability strategy in ESB. Having successfully delivered our first Sustainability Programme, 2008-2012, 2013 focused on extending the scope of sustainability as a concept from a relatively narrow focus on environmental issues to a broader approach integrating economic, social, environment and governance requirements within the sustainable development framework. The development of our new sustainability strategy evolved from a series of engagements with key organisational influencers, ensuring a broad, rigorous and engaged approach to the creation of the new strategy.

A key part of our Corporate Strategy to 2025 is to leverage knowledge within ESB to advance the low carbon agenda through sustainable innovation. Our sustainability strategy supports our corporate strategy, and reflects our determination to build a successful business in the long-term as we move to decarbonise our generation activities by 2050, in line with other European utilities.

FOR FURTHER DETAILS ON THE BUSINESS ENVIRONMENT CONTEXT FOR ESB'S STRATEGY, [PLEASE CLICK HERE](#)

ELECTRICITY INDUSTRY STRUCTURE

One Single Electricity Market (SEM) - All-island



SUSTAINABILITY STRATEGY

2.3 SUSTAINABILITY STRATEGY

In 2013 we launched our new Sustainability Strategy based on 24 key objectives in support of our overall Corporate Strategy. The new strategy builds on the many successes of the 2008 Sustainability Programme with a strong emphasis on maintaining the huge enthusiasm and high level of engagement that staff have for working in a sustainable manner.

The new strategy is focused on embedding sustainability in our business and outlines how sustainability supports the Corporate Strategy across the five key pillars of our strategy, which are to:

- build a balanced low-carbon generation and supply business of scale in the all-islands market as we move to a low-carbon economy
- engage with our employees to enhance performance and with our customers, suppliers and the community as part of our broader responsibilities to society
- minimise our impact on the environment, deliver cost savings and use our resources in a cost efficient manner
- develop new low-carbon business opportunities as a source of competitive advantage towards 2050
- lead the development of Smart Networks and to facilitate renewables integration onto the network.



At the National Champion accreditation event to mark the European Business Awards were Aidan Scollard RSM, Colm de Búrca ESB, and British Ambassador to Ireland Dominic Chilcott.

In 2013 ESB was selected as a national champion in the Environmental and Corporate Sustainability category of the European Business Awards and re-certified to the Business in the Community Ireland Business Working Responsibly Mark.



Colm de Búrca, Bevin Cody, Brian Gray and Kristin Quinn (all ESB) with Tina Roche, CEO of BITC and Pat O'Doherty, Chief Executive ESB, pictured at the awards ceremony for the BWR Mark.

SUSTAINABILITY OBJECTIVES



OUR PROGRESS IN 2013

World Class Networks	
Objective	Progress Update
Reduce losses on the network	In 2013 ESB Networks invested almost €421m in upgrading the network. A further 2,579kms of 10kV Network converted to 20kV operation, which reduces losses on the network by approximately 5,000kWh per km installed.
Connect renewable energy onto the Network	ESB Networks and NIE connected a total of 541MW of renewable capacity in ROI and NI during 2013, bringing renewables capacity on the island to 2793MW.
Develop Smart Networks	ESB Networks and 4 other leading European utilities have commenced work on a joint domestic Demand Response project to assist Distribution System Operators fulfil their future role in the European electricity system.
Implement Smart Metering	ESB is awaiting a regulatory decision from Commission for Energy Regulation to progress to detailed design and procurement stage.

Sustainable Innovation	
Objective	Progress Update
Promote Electric Vehicles	ESB installed 800 AC Public Charging points and 51 DC Fast Chargers in Republic of Ireland. NIE installed 130 charge points in Northern Ireland during 2013.
Fibre to the Building	ESB is in the process of forming a joint venture company to develop a nationwide fibre optic network using ESB's electricity infrastructure to deliver a national broadband network.
Pursue low-carbon consultancy opportunities	ESB International is actively pursuing opportunities in renewable generation, electric vehicles and energy efficiency sectors. Consultants have been engaged directly with a major client to drive energy saving projects.
Invest in emerging clean energy sector	ESB's clean-tech VC fund NovusModus Fund currently manages investments in eight companies in the cleantech sector.
Assess opportunities in emerging clean-tech areas	Planning permission was lodged for a 22kW solar PV project and a market and partner assessment is underway for ground and roof mounted solar in GB, NI & ROI.

As part of our strategy, we committed to communicating internally and externally on progress against our strategic objectives. The work delivered by the business during 2013 in making significant progress against our 24 strategic objectives underlines our commitment to embed sustainability at the heart of our business operations. Similarly, the spectrum of the business activities covered by the strategy and the progress on show, illustrates the commitment, as well as the specific contributions that each part of the business has to make in delivering on the strategy.

Generation & Supply Business of Scale

Objective	Progress Update
Reduce emissions from generation portfolio	Generating station CO ₂ emissions in 2013 have reduced to 9.3 million tonnes, a reduction of 1.5 million tonnes on 2012. Carbon Intensity of generation activity for 2013 was 578g/kWh a reduction of 34g/kWh on 2012.
Increase renewable energy sources	Construction of Woodhouse 20MW wind farm is progressing well with turbine foundations completed, substation construction at an advanced stage and turbine delivery commencing in August 2014. When completed it will increase ESB's total installed wind generation capacity to over 400MW.
Maintain compliance with applicable laws	A new Environmental Assurance process was established supported by a new cross-company Environmental Management Group. No material breaches of environmental legislation in 2013.
Influence carbon policy	ESB made submissions on the implementation of the Energy Efficiency Directive in Ireland, the 2050 Energy Low Carbon and Transport Road Maps and received approval from the Commission for Energy Regulation on the Electric Vehicle Pilot Project.
Work with customers to improve energy efficiency	Electric Ireland collaborated with local councils and householders to deliver large scale household energy efficiency retrofits to over 2,000 dwellings.
Achieve SEAI Better Energy Targets	Better Energy reduction targets of 220GWh for the 2011/13 period have been delivered and have been submitted to Sustainable Energy Authority of Ireland for final verification.

Engaged & Agile Organisation

Objective	Progress Update
Engage with our staff to promote sustainability	36 video entries from across the business were made to our annual Sustainability Awards in December 2013 highlighting the embedded nature of sustainability in ESB. The overall winner was Ardnacrusha Generation Station.
Launch ESB Energy for Generations Fund	ESB's new Corporate Responsibility Fund, ESB Energy for Generations, was launched in November 2013, committing €2 million per annum to the support of voluntary organisations and promotion of staff volunteering.
Communicate progress against Sustainability Targets	We are committed to communicating externally and internally on our progress via 6-monthly updates and through our annual Sustainability Report.
Embed Sustainability in procurement	ESB published a Supplier Charter and 3rd Party Contractor Requirements, emphasising our focus on Sustainability during procurement.

Transformed Cost Structure

Objective	Progress Update
Reduce internal CO ₂ Footprint	In 2013 fleet CO ₂ emissions reduced by 5.6%, CO ₂ from car travel reduced by 3.3% and building electricity consumption reduced by 2.3%. Despite an increase in national kg CO ₂ /kWh conversion factors, our internal CO ₂ footprint reduced by 36 tonnes in 2013.
Improve environmental management	A revised ESB Group Policy statement on Environmental Management and Sustainability was published.
Reduce waste and increase re-cycling	In 2013, ESB Networks achieved a 97.5% diversion from landfill, NIE a 97% recycling rate (excluding construction waste) and Electric Ireland a 97% recycle rate.
Reduce water usage	ESB continues to monitor water usage levels at all major locations. A leak detection process is underway in Fitzwilliam Head Office where consumption has increased and water conservation projects are on-going in Moneypoint, Aghada and Poolbeg Generating Stations, where over million litres of water have already been recycled.
Achieve Public Sector Energy Efficiency Targets	ESB has made a full disclosure to the Sustainable Energy Authority of Ireland as part of delivering on Public Sector Energy Targets.

ESB GROUP OVERVIEW

2.4 OVERVIEW

Business segment	Description	Revenue	Operating profit *	Capital expenditure	Average employee numbers	Link to other sections in this report
ESB Generation and Wholesale Markets	ESB Generation and Wholesale Markets (G&WM) comprises ESB's generation, trading and asset development activities. This business segment operates power stations and wind farms in the Republic of Ireland, Northern Ireland and Great Britain.	€1,609M	€355M	€254M	1,009	ESB G&WM operational review Page 18
ESB Networks	ESB Networks owns and operates the electricity distribution network and owns 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 from the Group's generation and supply businesses.	€927M	€294M	€421M	3,140	ESB Networks operational review Page 22
Northern Ireland Electricity (NIE)	NIE is responsible for the planning, development, construction and maintenance of the transmission and distribution network, as well as with the operation of the distribution network. NIE 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').	€280M	€77M	€98M	1,291	NIE operational review Page 27
Electric Ireland	Electric Ireland is a leading supplier of electricity and gas to residential, commercial and industrial customers of Ireland. Revenues are derived from sales to electricity and gas customers.	€2,078M	€79M	€7M	322	Electric Ireland operational review Page 29
Other Segments	Other segments include ESB Innovation and our internal service providers. Its purpose is to lead collaboration across the ESB Group, to identify and develop emerging technologies as commercial business opportunities, for ESB and for external clients.	€320M	(€25M)	€45M	1,728	Other segments operational review Page 32

* Before interest and taxation

BUSINESS MODEL:

To be a strong, diversified vertically integrated utility (VIU)



GENERATION

- Wind
- Thermal
- Hydro
- Pumped storage
- Ocean

Creating cleaner power using sustainable generation



NETWORKS

- Smart grids
- Smart meters
- Connecting Renewables

Building smarter networks to put the customer in control of their energy



SUPPLY

- Supplier of electricity and gas
- Ecars
- Smart meters
- Fibre broadband

Bringing sustainable and competitive energy solutions to all our customers

GENERATION & WHOLESALE MARKETS

2.4.1 GENERATION & WHOLESALE MARKETS

The Generation and Wholesale Markets (G&WM) business develops, operates and trades ESB's electricity generation assets. This portfolio of assets includes 4,300MW of generation in the Single Electricity Market (SEM) and 475MW in Great Britain (GB).

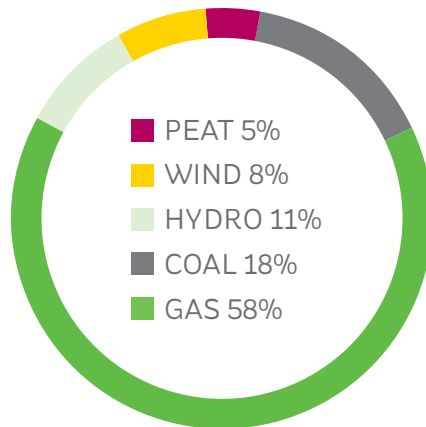
Electricity generation accounts for over 90% of ESB's use of energy. In 2013, ESB consumed 33,349GWh of fossil fuel energy in generating electricity.

This comprised:
 17,484GWh of natural gas
 11,285GWh of coal
 4,257GWh of peat
 323GWh of oil

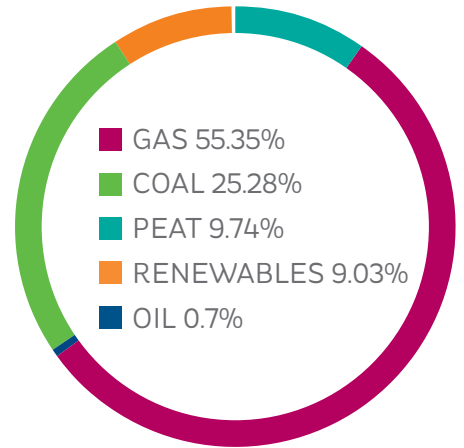
The relevant EU and national legislation addressing the environmental impact resulting from the operation of thermal power stations is addressed through conditions contained in the Integrated Pollution Prevention and Control Licences (IPPC) and Greenhouse Gas Permits to which the power stations are subject and which are issued and monitored by the Environmental Protection Agency (EPA). These licences and permits are audited by the EPA on at least an annual basis to individually assess station compliance with all conditions included. ESB hydro electricity stations, which do not come under the remit of the IPPCL regime, generally are subject to control under Water Pollution legislation and specifically to the conditions contained in relevant water discharge licences. These water discharge licences are issued and monitored by the relevant Local Authority. During 2013, no significant breaches were noted by the regulatory authorities.

The main focus of sustainability for our thermal generation fleet has been an overall reduction in emissions to air as well as reducing our carbon intensity (CO₂ emitted per unit of electricity generated).

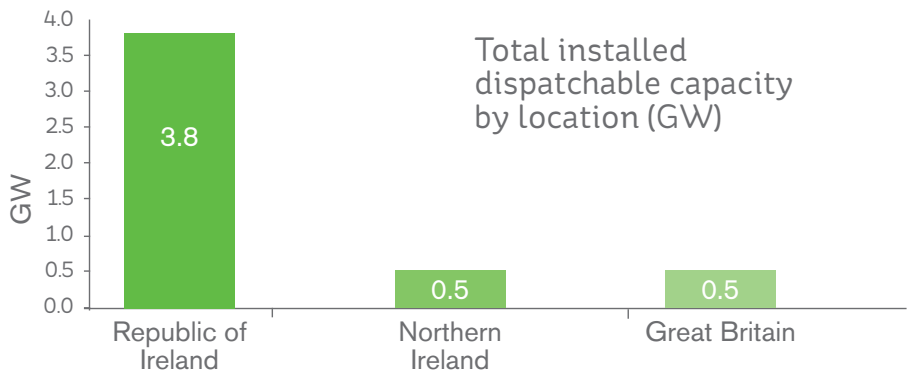
GENERATION FUEL MIX



16TWh GENERATED IN 2013



GENERATION CAPACITY



The absolute levels of CO₂ emissions from G&WM's SEM generation plants in 2013 were 34% less than in 2005. The carbon intensity of ESB generation has reduced by over 15% during the same period. Generation activities also account for the vast bulk of utilisation of water and our aqueous discharges, where water is used for steam generation and cooling.

The carbon intensity of our generation portfolio was 578kg CO₂/kWh in 2013, a reduction of 34g/kWh on 2012.

FOR FURTHER DETAILS ON OUR AIR EMISSIONS, PLEASE REFER TO SECTION 5.3. [→](#)

FURTHER DETAILS ON OUR WATER CONSERVATION EFFORTS ARE GIVEN IN SECTION 5.5. [→](#)



Crane erecting a turbine blade during wind farm construction

RENEWABLES

ESB's ongoing investment in a low carbon portfolio continued in 2013 with 2 new wind farms becoming operational; Myndd y Betwys (35MW) in Wales and Carrickatane (21MW) in Northern Ireland, bringing our total wind portfolio to 389MW.

Construction of a further wind farm (20MW) in Woodhouse, Co. Waterford is ongoing with a view to entering commercial operations in 2015.

We continue to operate 217MW of Hydro and 292MW of pumped storage capacity.

ESB'S WIND GENERATION INSTALLED BASE



ARDNACRUSHA

CASE STUDY

ESB ARDNACRUSHA WINS OVERALL SUSTAINABILITY AWARD 2013 FOR ITS NEW RUNNING REGIME IN THE SEM.

Ardnacrusha in Co. Clare was commissioned between 1929 and 1934. It is Ireland's largest river hydroelectric scheme operated on a purpose built canal connected to the River Shannon.

When first built, the 86MW plant was adequate to meet the electricity demand of the entire country. Today, Ardnacrusha represents 2% of ESB's total installed capacity.

In 2012 Ardnacrusha took steps to re-register the traded output of the station to reflect changes brought by the SEM and improve overall generation efficiency.

As a result, the station efficiency has increased by 4.5%. This efficiency results in more MWs being available from the same overall volume of water. Ardnacrusha optimises how the station generates, ensuring that the units are scheduled at a higher efficiency set-point. This increased efficiency lead to an additional 4,000MW hours generated, which offset Ireland's CO₂ emissions by 2,000 tonnes in 2013 alone.

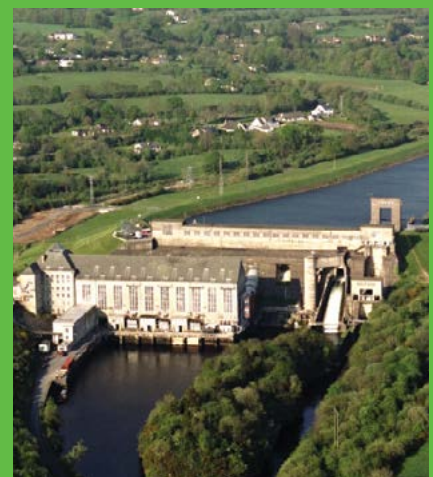
The station now runs at maximum load for over 90% of the time, prior to the re-registration, units were being run at minimum load 50-60% of the time. Now, generating one mega-watt hour uses 750,000 litres less water. This water conservation ensures sustainability of the river Shannon while maximising the overall output.



Accepting the Overall Award on behalf of Ardnacrusha Station from ESB Chief Executive Pat O'Doherty are (l-r) Catherine Halpin, Sean McMahon, Billy Condon and Joe O'Sullivan.

Over the 3 years prior to the re-registration, on average 7% of Ardnacrusha's output was not traded in the SEM. As a result no revenue was received for this energy. After re-registration 99.3% of energy is now traded, this has resulted in a revenue increase of €3.9m.

This has also increased ESB's total renewable energy traded on the SEM by 22,000 mega-watt hours. This is the equivalent of a 9MW wind farm.

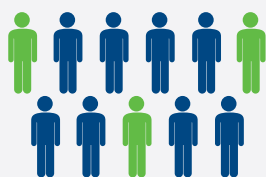


A FULL OVERVIEW OF THE GENERATION & WHOLESALE MARKETS BUSINESS IS AVAILABLE [IN THE ANNUAL REPORT HERE](#)

CARRINGTON

CARRINGTON 881MW CCGT CONSTRUCTION PROJECT

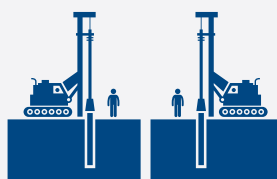
The development of Carrington generation station near Manchester, UK, is central to the ESB strategy to compete successfully in the energy market with a balanced, low carbon generation portfolio. Carrington is currently undergoing construction, with a view to entering commercial operation in 2016



400 WORKERS
on site, rising to over 800 during Q2 2014



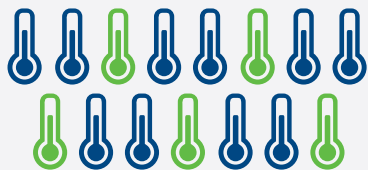
The 881MW output will be enough to power over **1 MILLION HOMES**



3,073 PILES have been laid as part of the station foundations

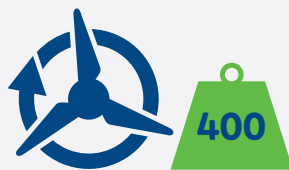


OVER 10,000 M² of concrete have been poured on site, mainly for the 2 powertrain foundations



The gas exhaust temperature of GT26 turbine is roughly equivalent to the initial point of explosion of a volcano

616°C



The GT26 Turbine, due for delivery early in 2014, weighs around **400 TONNES** (equivalent of 2 x Boeing 777 aircraft). Such heavy loads are being delivered via Manchester Shipping Canal



It takes a GT26 turbine just **81 HOURS** to generate enough electricity to run the London Underground for a whole year



Pictured in December are the cross-business team for Carrington.



Power Train Foundation, Unit 1 steelwork.



As of January 2014, the numbers of workers on site has increased to over 400 people.

ESB NETWORKS

2.4.2 ESB NETWORKS

ESB Networks is an infrastructure focused business with responsibility for the maintenance, extension and reinforcement of the transmission and distribution network in the Republic of Ireland. In 2013 a total of €421 million was invested in extending, reinforcing and facilitating renewables connections on the distribution and transmission system. ESB Networks has now connected 2,064 MW of renewable generation to the network in the Republic of Ireland.

In serving the Republic of Ireland's 2.4 million electricity customers, ESB Networks maintains a vast electricity distribution system, highlighted below.

The very distributed rural population in Ireland is reflected in the size and scale of an electricity distribution system that is unique. Ireland has four times the European average length of network per capita. Approximately 66% of Irish medium voltage networks are single-phase and a ratio of over 6:1 overhead to underground networks exists- on an island on the edge of the Atlantic. All these factors contribute to

the significant challenges ESB Networks contend with in maintaining networks to ensure customers receive a top quality electricity supply.

During 2013, 13,828 new connections were completed, an 8% increase on 2012.

ESB Networks is firmly focused on the delivery of sustainable distribution and transmission solutions, which are delivered through a work programme of reducing network losses, developing the smart grid and smart metering programmes and facilitating the connection of renewables.

REDUCING NETWORK LOSSES

Conversion from 10kV to 20kV doubles the capacity and reduces losses by up to 75%. 2013 saw a further 2,579 kms of network converted to 20kV, bringing the overall length of converted network to 44,753kms to date. These conversions have delivered approximately 210GWh savings in reduced losses and are the equivalent saving of over 200,000 tonnes of CO₂ per annum.

In addition to converting 10kV networks to 20kV, ESB Networks are also installing amorphous core and Hexaformer transformers. These advanced transformers reduce iron losses by 70% over conventional models. ESB Networks is also testing how controlling network configurations can reduce losses and increase network capacity, including closing medium voltage loops and actively switching networks based on the time of day, season or wind generation on the system. ESB Networks has also developed and tested Conservation Voltage Reduction (CVR) schemes where a small reduction in voltage can provide customers with energy savings. Over 12 months ESB Networks tested CVR, proving the energy savings and ensuring that customers were not impacted by the reduction in voltage. Implementing CVR nationally with a 3% voltage reduction could save >300,000,000 units of electricity per year from customers electricity bills or greater than 200,000 tonnes of CO₂.

Reducing network losses through upgrades such as this not only benefits the environment, they also have a positive effect on local communities benefiting from a more resilient electricity network.

IRELAND'S ELECTRICITY NETWORK

2.1m wooden poles

230,000 overhead distribution transformers

20,000 ground-mounted urban distribution transformers

150,000km of overhead MV/LV network

22,000km of MV/LV urban underground network

746 HV substations (400kV-38kV)

2.3m meters

7,174km of Transmission network



Hexaformer Transformer

REBUILDING THE NETWORK

CASE STUDY

MIZEN PENINSULA RECEIVES A MAJOR BOOST FOLLOWING CONVERSION FROM 10kV TO 20kV

The businesses and community at large of West Cork benefitted from a major upgrade of MV networks through the upgrade works of the Mizen Loop. The Mizen Peninsula is subjected to adverse weather conditions which in the past has contributed to higher levels of faults than less remote parts of the country. The project took place over a 4 year period , culminating in a tail section of network from Goleen to Mizen Head. The upgrade will mean fewer fault outages and a major reduction in voltage problems for businesses and rural customers.

The project was delivered through the collaboration of 17 two person change over crews, 2 Live Line crews, commissioning personnel and operational staff, supported by clerical support and customer care teams.



Work at one of the Single-Phase Transformers.



Safety record was maintained throughout the changeover project



Mike Coomey, CSS Bandon, during a team briefing with staff.

"We have a turnover of €104m in total and run 24 hours a day, 6 days a week. It is very important to us to be able to rely on the network. We now have a constant point of contact with ESB if needed and have an excellent relationship with the local teams."

Neil Walton, Mill & Maintenance Manager, Barryroe Co-op. (One of the businesses benefitting from the upgrade).

SMART NETWORKS

SMART GRIDS

ESB, as part of the FINESCE consortium has secured €3.5 million in EU funding for Smart Grid research in Ireland. The Consortium is made up of 19 partners including leading European electrical utilities and will engage in research and development of Telecom and IT solutions for the Smart Grid.

The project, led by ESB Telecom Services, will seek to apply advanced internet technologies and architectures to support Smart Grid requirements, particularly in two main areas;

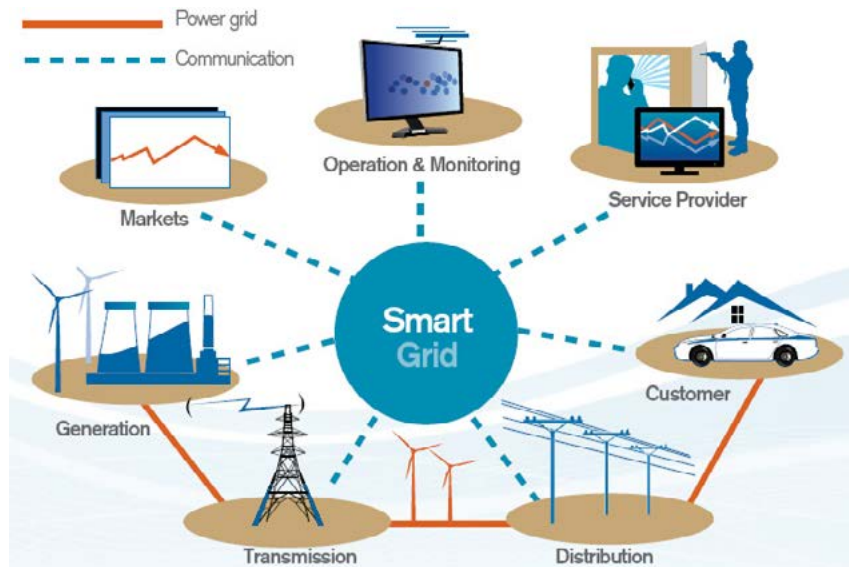
- The first will look at how dynamic control of electric vehicle charging can be used to balance the electricity system.
- The second will explore how utilities can use advance optical burst telecommunications switching technology to enhance the functionality and efficiency of their networks.

ESB is well placed to avail of this research, with Telecom Services having developed a sophisticated Telecom Network over the past 40 years comprising of microwave sites, fibre optic networks and satellite links.

SMART METERING

Smart metering is the key to empowering customers to minimise their electricity costs and participate in the electricity market. Under the mandate of the CER, ESB Networks will install the smart metering infrastructure in Ireland and play a key role in providing the technology, telecommunications and management required. In the future, customers will be able to avail of offers to reduce their maximum import capacity – saving money and reducing societal investment costs in higher capacity lines and sub-stations.

ESB Networks provided input into CER consultations on time-of-use tariffs, information to the customer and pay-as-you-go meters. A final overall CER decision on the full roll-out of smart meters is expected in 2014, which will enable progression to detailed design and procurement stage.



Network Technicians at work in the field.



CONNECTING RENEWABLES

2013 saw ESB Networks embark on an ambitious programme of works on the Transmission System with commencement of the construction of 5 new 220kV/110kV Gas Insulated Switchgear (GIS) sub stations in the South West of the country. The primary driver for these new stations is the significant amount of renewable generation seeking to connect to the electricity system from this region. Facilitating the connection of renewable sources electricity to the grid supports ESB's strategic objectives in leading the development of Smart Networks and renewables integration on the network.

BY 2027:

- ESB Networks will have enabled the connection of more than 5,000MW of generation capacity to the electricity network grid – with more than 2,500MW connected via the distribution system
- ESB Networks will facilitate the achievement of government targets in the wave and ocean energy sector

CUSTOMER SERVICE

ESB NETWORKS EXEMPLARY CUSTOMER SERVICE

During 2013 storm events, the level of commitment demonstrated by ESB Networks staff to their customers and communities became apparent. Severe storms over the Christmas and New Year period, saw wind and lightning account for 10,620 individual outages, resulting in 742,753 customer disruptions. At the peak of the storms over 1,300 networks personnel were deployed on storm repairs. The Customer Contact Centre managed up to 34,000 calls per day over that period and there was widespread media coverage of the efficiency of the Networks response, which resulted in a speedy restoration of supply in the majority of cases.



ESB Networks staff during work in Killarney.



ESB Networks at a location in Enniscorthy where severe damage was caused.

A FULL OVERVIEW OF THE ESB NETWORKS BUSINESS IS AVAILABLE [IN THE ANNUAL REPORT HERE](#)

REACTION IN THE TWITTERSPHERE!
@ESBNetworks

Mighty work from ESB Networks. Power restored to more than 78,000 homes

Electricity restored to 30,000 homes so far today. ESB workers go from strength to strength, fair play to them

Power restored already! Great work given the circumstances massive outages everywhere

Thanks to all ESB Networks emergency crews.... Can't be much fun patching things up on a night like this!

Power restored in our rural area in less than an hour. High winds stormy and dangerous well done lads! Thanks

ESB Networks are doing a fantastic job updating customers through their various online channels, same throughout Xmas ESNB



ESB Networks crews on Coastguard helicopter en route to restore supply on Inis Mór island.

In recognition of the customer care centre's work in supporting the Networks teams in the field, the Lord Mayor of Cork, Cllr John Buttimer, visited the Networks Customer Care and Scheduling Centre teams in Wilton during 2013.



The Lord Mayor in the Customer Care Centre with Carmel Geaney, Logistics Manager and team members Annette Lane and Siobhan Moynihan.

NIE

2.4.3 NIE

NIE's principal activities are the construction and maintenance of the transmission and distribution networks in Northern Ireland and the operation of the distribution network. During 2013, NIE contributed £140m into the Northern Ireland economy through the employment of approximately 1,300 staff and payments to suppliers and local authorities.

In 2013, NIE continued to invest in Northern Ireland's electricity infrastructure by replacing worn assets; servicing increased customer demand and facilitating connection of renewable generation whilst maintaining safety and security of supply. NIE achieved certification to PAS55 Asset Management standard during 2013.

The transmission and distribution networks comprise a number of interconnected networks of overhead lines and underground cables which are used for the transfer of electricity to 840,000 consumers via a number of substations. During the year an estimated 8.1TWh of electricity was distributed to consumers in NI. There are 2,200km of transmission circuits, approximately 45,000km of distribution circuits and 258 major substations. NIE's transmission system is connected to that of the Republic of Ireland (ROI) through a 275kV interconnector and to that in Scotland via the Moyle Interconnector. There are also two standby 110kV connections to ROI.

FACILITATING THE CONNECTION OF RENEWABLES

Since the Department of Energy, Trade and Industry's (DETI) introduction of increased Renewable Obligation Certificate (ROC) incentives for small scale renewable generation projects in April 2010, there has been a large influx in the rate of applications for connections of renewable generators in the range 3kW to 500kW.

60MW of large scale renewable generation (typically over 2MW in size), comprising three wind farms, was connected to the network (compared with 7MW connected in 2012).



Joe O'Mahony, NIE Managing Director, receiving NIE's PAS55 certification from Andrew Sharp AMCL, AMCL.

NIE ACHIEVED THE BRITISH STANDARDS INSTITUTE'S 'PAS 55' CERTIFICATION

Throughout 2013 applications for the connection of small-scale generation continued to increase significantly. During the year 3MW of small scale renewable generation comprising single wind turbines, anaerobic digestors, hydro turbines and domestic solar PV microgeneration projects were connected to the network: the comparable figure for 2012 was 4MW connected. This high level of activity requires significant 11kV network reinforcement, particularly in the west of Northern Ireland.

Parts of the 33kV network also require reinforcement, investments for which will be subject to agreement with the Utility Regulator. Connections during 2014 will increase further as a large number of connection offers accepted in 2013 will be connected.

SHIFT & SAVE SMART GRID TRIAL

The 'Shift & Save' Smart grid trial continued during the year. The trial, involving 200 homes in the Coleraine area, investigates how Smart meters and Smart grid technology could change homeowners' energy usage patterns, particularly at times of peak demand in the early evening, to reduce and flatten demands on the network. Smart meters were installed in participants' homes and Smart monitoring equipment installed at the substations supplying these homes. Following an initial technology monitoring phase, customer behaviour is now being monitored via in-home displays and the application of a multi-rate 'shadow tariff'. Initial analysis suggests that consumers are making changes to shift some of their energy use away from the peak period. The trial will run to June 2014.



NIE launches the Shift & Save trial with Coleraine Borough Council

STORM RESPONSE

NIE STORM RESPONSE

Severe storms during the year resulted in widespread damage to the network and the loss of supply to around 140,000 customers.

NIE emergency crews, ably assisted by around 100 Networks staff from ESB and other contractors, worked around the clock to rebuild the network which had been damaged by snow and strong winds. NIE's rapid mobilisation of employees and external contractors, working in very difficult conditions, enabled electricity to be restored to 99% of affected customers, within 48 hours.



More than 140,000 homes were left without electricity as a severe storm hit Northern Ireland.



NIE Crews out from first light restoring power supplies.

NIE continues to improve its emergency response capabilities during severe weather events in order to effectively restore supply to all consumers. The significant commitment of frontline staff helps to ensure that NIE effectively manages this very important aspect of its business. This was tested in March 2013 when a severe snow storm resulted in widespread damage to the network.

NIE's emergency plan was implemented with the mobilisation of employees and external contractors including additional resources from the ROI.

Helicopters were deployed to assist in locating and assessing damage and delivering equipment and crew to locations otherwise inaccessible due to heavy snow.

Throughout December 2013 there were several periods of severe weather resulting in a total of 96,000 customer interruptions in supply. Supplies of electricity to all but 600 affected consumers were restored within 24 hours.

Following the severe storms in October 2013, a team of 46 NIE overhead line workers and tree cutters travelled to Kent to assist UK Power Networks restore power supplies.



NIE crews who repaired network faults in England in October 2013.

A FULL OVERVIEW OF THE NIE BUSINESS IS AVAILABLE IN THE ANNUAL REPORT [HERE](#)

ELECTRIC IRELAND

2.4.4 ELECTRIC IRELAND

Electric Ireland is the retail arm of ESB, supplying competitive electricity, gas and energy services to all market segments. The Electric Ireland brand was launched in 2011 and is now one of the foremost retail brands on the island.

2013 saw Electric Ireland competing effectively in the residential and business markets with competitively priced products, resulting in over 80,000 residential electricity customers switching to Electric Ireland in 2013. During the year, Electric Ireland has also won over 50,000 residential gas customers bringing the total residential gas customers to 130,000 since entry into the residential gas market.

A key factor in the success of the business is the capability, knowledge and flexibility of our staff in understanding our customer needs and providing innovative products and services to meet those needs.

Electric Ireland's strategic objective is to be the foremost supplier of energy and related services in the Irish market offering competitive and sustainable energy solutions.

During 2013, Electric Ireland:

- Provided excellent products and customer service
- Proactively worked with our customers where debt repayment was an issue and developed products and payment solutions to meet their needs
- Delivered cost improvement targets
- Maintained Electric Ireland as the leading energy supply brand in Ireland.

ENERGY EFFICIENCY

Electric Ireland works with customers to help them reduce usage and get better value from their electricity consumption through the promotion of energy efficient products and energy awareness campaigns. These campaigns included energy efficiency advice, ESB's online store and web-based tools including the 'Appliance Calculator' and the 'Energy Wizard' home auditing tool, which is also available as an app.

The Better Energy Programme, administered by SEAI, is a key component of the National Plan to deliver the EU target of 20% improvement in energy efficiency by 2020. As part of this Programme, Electric Ireland is on target to deliver over 220 GWh of energy efficiency savings cumulatively for 2011 through 2013, the equivalent of a reduction in electricity consumption of over 40,000 homes. In 2013 this was achieved through a range of programmes, from retrofitting 2,000 homes to minimise their energy usage to a suite of measures to reduce consumption in commercial retail premises and eliminate energy losses in industrial processes.

Electric Ireland collaborated with the Sustainable Energy Authority Ireland (SEAI) and other local authorities to deliver 14 area-based retrofit projects around the country. The area-based approach is based on the premise of economies of scale in delivering energy efficient measures to homes in close proximity. The householders benefit from reduced energy costs, warmer homes and the associated health benefits. The Local Authority/Housing Association benefit from upgraded housing stock and reduced maintenance requirements.



Dr. Brian Matherway, Chief Executive SEAI and Pat Rabbite, TD, Minister for Communications, Energy & Natural Resources on site at an area-based retrofit project.

FUEL POVERTY AND DEBT MANAGEMENT

The current economic environment presents significant challenges for debt management. While proactively working to ensure that debt is collected, Electric Ireland has responded to customers experiencing serious hardship by:

- Identifying as early as possible when customer payments are in arrears and contacting them to discuss the options available. Electric Ireland made circa 250,000 tailored payment arrangements with customers in 2013.
- Actively promoting the installation of pay-as-you-go (PAYG) meters for those in most difficulty. It is our objective to further minimise disconnections through the continued roll out of pay-as-you-go meters and special payment arrangements. Approximately 14,000 PAYG electricity meters have been installed to assist customers with financial difficulties.
- Proactively engaging with the society of St Vincent de Paul, The Money Advice and Budgeting Service (MABS) and other agencies to support customers experiencing affordability issues and those with special requirements.

PAPERLESS BILLING AND E-SERVICES

The popularity of e-services such as paperless billing has increased significantly with customers, as not only do they receive their bill online they can also view their account and payment details, and review their consumption history.

With over 210,000 customers now receiving paperless (online) billing, it is all leading to a more



Edel McCarthy and Trish Canty, Electric Ireland receiving their Sustainability Award from Pat Naughton, Executive Director Group People and Sustainability.

positive impact on the environment by Electric Ireland particularly with regard to paper usage. This level of online customer engagement equates to 1,259,928 less paper bills produced. This also results in an equivalent reduction in paper bill inserts as customers receive them online.

Over 50% of our new customers request the customer Welcome Pack online, again reducing paper usage.

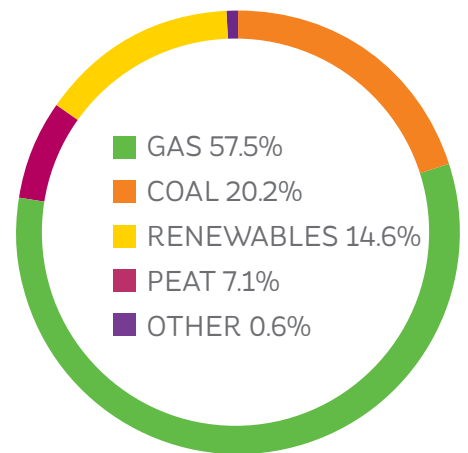
With the increasing use of web, email and social media channels such as Twitter and Facebook, customers are engaging with Electric Ireland in new ways. Meeting customer needs through these channels and enabling them to carry out more transactions using digital channels is one of Electric Ireland top service priorities.

The online Blog educates customers about energy efficiency and assists them in understanding the measures they can take to improve their own energy usage. It directs customers to online applications such as the Appliance Calculator and to the Energy Saving Wizard. There have been 76,186 downloads of the Appliance Calculator smartphone app. During the heat wave in 2013 Facebook was used to engage customers on energy efficient cooling, a post which 29% of the Facebook fan base liked, shared or commented on. Over 76,000 people now engage with Electric Ireland through Twitter. All of this is leading to a more positive impact on the environment by the business and for our customers. These efforts have a positive impact on the environment and Electric Ireland's efforts were recognised with a Sustainability Award in 2013.

The carbon intensity of Electric Ireland supply activity in Ireland was 535gCO₂/kWh in 2013.

Over 210,000 customers now receive bills online

SUPPLY FUEL MIX



The app enables customers have greater control over their home energy costs by finding out how much their home appliances cost to run.

A FULL OVERVIEW OF THE ELECTRIC IRELAND BUSINESS IS AVAILABLE IN THE ANNUAL REPORT [HERE](#)

EXTERNAL RECOGNITION

During 2013, Electric Ireland's efforts in the areas of social media and sponsorships were widely recognised, through the following awards;

- European Sponsorship Association – Best in Europe Sponsorship
- Social Media Awards - Best Use of Social Media for a Sponsorship Campaign
- IIA Net Visionary Awards - Most Creative use of Social Media for Compelling customer engagement
- Eircom Spiders - Social Media Interaction
- Eircom Spiders - Best Campaign (Powering Kindness)
- AIM Awards - Best Sponsorship



Pictured above are Ken McKervey, Commercial Manager Electric Ireland, Geraldine O'Leary RTE who presented the award, Lisa Browne, Sponsorship and PR Manager, Trish Canty and Catherine O'Dwyer, all from Electric Ireland.



Lisa Browne, Sponsorship and PR Manager, Electric Ireland receiving the European Sponsorship Association Award for 'Best in Europe Sponsorship' in respect of Electric Ireland's sponsorship of Team Ireland for the London Olympics. The award was presented by Dominic Lyle, Director General of the European Association for Communication Agencies in London on January 29th last.



Pictured are host Neil Delamere along with Lisa Browne and Edel McCarthy, Sponsorship & Digital Marketing Manager, being presented with the 'Excellence in Social Media' award by Emmet Dunne, Managing Director, Kooba at the Eircom Spider Awards.



A FULL OVERVIEW OF THE ELECTRIC IRELAND BUSINESS IS AVAILABLE IN THE ANNUAL REPORT [HERE](#)

INNOVATION

2.4.5 INNOVATION

The scale of the challenges and opportunities facing the energy sector requires new thinking and innovative solutions. New technologies, increased competition and an increasingly sophisticated consumer mean that ESB must innovate faster to remain competitive and to deliver on our strategy and objectives. The dedicated Innovation Business Unit was established as a focal point to exploit new ideas that will drive growth opportunities and transformation across the ESB Group.

ELECTRIC VEHICLES

ESB continued its rollout of electric vehicle infrastructure in 2013. A wide scale charging infrastructure is now in place with over 1,000 public charging and fast charging points installed on the island, in addition to over 500 domestic charge points. Ensuring an island wide infrastructure roll out, NIE installed over 130 charge points across Northern Ireland. Ireland became the first country to implement the IBM integrated EV IT platform, which will allow for a seamless user experience at any charge point across Ireland. The project will provide the services needed to operate, manage and maintain the network of charge points in a secure and reliable manner.

ESB is collaborating closely at national and EU level in the electromobility space. ESB chairs the

Eurelectric EV Task Force and works closely with government on policy and regulation, local authorities on infrastructure deployment, motor manufacturers and equipment and infrastructure suppliers.

FURTHER DETAILS ON EVS AND THE GREAT ELECTRIC DRIVE IN THE ELECTRIFICATION OF TRANSPORT SECTION 5.8. 

ESB TELECOMS

ESB Telecoms is competing strongly in the domestic fibre and towers market and has connected more towers with fibre, thereby increasing their value to operators. ESB Telecoms will continue to leverage the extensive national fibre and tower footprint already in place to ensure that towers are capable of dealing with the increasing demands for speed and capacity from mobile data users.



IBM Ireland Country General Manager Peter O'Neill with ESB Chief Executive Pat O'Doherty and Minister for Jobs, Enterprise and Innovation Richard Bruton TD launching details of the joint ecars IT project between ESB and IBM.

ESB'S INNOVATION STRATEGY FOCUSES ON THREE MAIN PILLARS:

Emerging Energy Technologies

New low carbon technologies are emerging, but no single technology addresses the challenges of decarbonisation, energy affordability and security of supply. A selection of new technologies – together with new business models – will be required to meet these challenges.

ESB Novusmodus, our clean-tech venture fund, gives us visibility on developments in

the relevant sectors. A dedicated team was established in 2013 to evaluate the technologies and business models that are emerging and determine how they can be transformed into commercial products and services for ESB.

Fostering an Innovative Culture

An Innovation Forum was set up in 2013 to establish a more structured approach to innovation and to develop a culture where ideas are generated, supported and implemented. The group will also support the development and

implementation of the Innovation Strategy and Road Map.

Collaboration and Strategic Partnerships

ESB views collaboration and partnerships with enterprises, representative groups, universities and other utilities as an important contributor to the development of future technologies, products and services. We are reviewing our current approach to collaboration and are planning to develop even stronger relationships with our partners to create new opportunities.

FIBRE TO THE BUILDING

FIBRE TO THE BUILDING

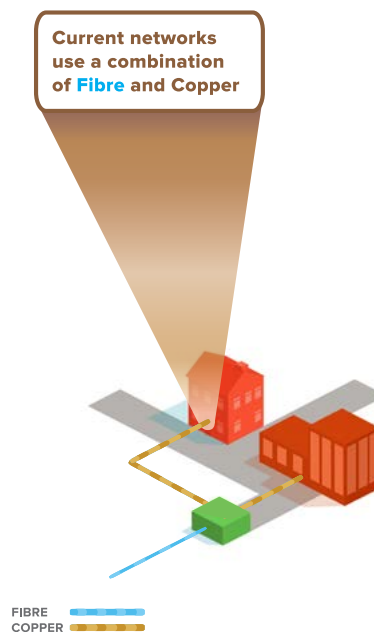
The Fibre to the Building (FTTB) project progressed significantly during 2013 with ESB and Vodafone agreeing to form a Joint Venture company. The initiative will leverage ESB's existing 38kV/MV/LV network assets to facilitate the deployment of the fibre network and the JV company will wholesale access to this network to all telecommunications service providers in Ireland. This will be the first 100% fibre network to individual homes and buildings across the country and will allow service providers to offer broadband products to their customers. This initiative supports the government's National Broadband Plan to meet the targets set out in the Digital Agenda for Europe and it is a key element of ESB's 2025 strategy.

ESB INTERNATIONAL

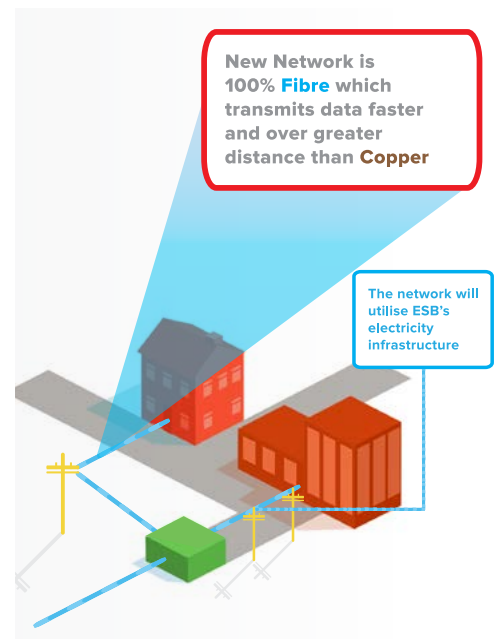
ESB International is a multi-disciplinary engineering consultancy specialising in the electricity sector and is a wholly-owned subsidiary of ESB Group. ESB International provides services to energy asset owners and investors relating to the development, construction, operations and maintenance of thermal power plants, wind farms and electricity transmission and distribution systems. Over the past 35 years ESB International has worked in more than one hundred countries, providing specialist engineering, strategic consultancy and operations and maintenance services relating to major energy projects.

In 2013 ESB International completed a major energy project for the US funded Millennium Challenge Account Tanzania to help rehabilitate Tanzania's out of date electricity infrastructure. ESB International's designers and construction supervisors worked in close cooperation with the local utilities. A primary focus in implementing the project was knowledge transfer of unique expertise and capability and to ensure a secure energy supply to drive development in Tanzania. ESB's work on the Millennium Challenge Project delivered a new 132kV interconnector with Zanzibar, the upgrading of 24 sub stations and overhead lines.

EXISTING NETWORKS



NEW FIBRE NETWORK FROM ESB & VODAFONE



Ollie Brogan, Managing Director ESB International; Johnny Shine, outgoing Deputy CE ESB; John Ashley, Project Director Tanzania; and Noel Walsh, Contracts Construction Manager, celebrate the inauguration of the Tanzania-Zanzibar Interconnector and the electrification of a small village in rural Tanzania with esteemed personnel, including Jakaya Kikwete, President of Tanzania, Alfonso E. Lenhardt, US Ambassador to Tanzania and Karl Fickenscher, MCA-T.

FOR MORE ON ESB INTERNATIONAL'S HOME AND OVERSEAS OPERATIONS [CLICK HERE](#)

EMERGING TECHNOLOGIES



Members of the Ocean Energy Team visit Pelamis Wave Power in Scotland (l-r): Technology Manager John Fitzgerald, Ocean Energy Manager Brendan Barry and Technology Integration Engineer Fergus Sharkey.



Ocean Energy device on trial in Galway Bay.

EMERGING TECHNOLOGIES

A dedicated team was established in 2013 to evaluate new technologies and business models that are emerging and determine how they can be transformed into sustainable commercial products and services for our customers.

Our Emerging Energy Technologies team continues to support the development of Ocean Energy in Ireland. Ireland's oceans have the potential, in time, to provide large quantities of indigenous, renewable energy and reduce our dependence on imported fossil fuels, generating significant jobs and growth in the economy.

ESB is playing a leading role through its development of the WestWave project. WestWave is a 5MW pre-commercial project and is a necessary technology demonstration and confidence building step before the industry can progress to larger and commercial projects.

Activities in 2013 included preparatory procurement work and consenting activities for the West Clare Killard site earmarked for this pioneering project. An application was made for funding from EU under the NER300 scheme. This scheme aims to support new low carbon technologies in their early pre-commercial stages of development. WestWave operation is currently planned for 2018.

ESB continued its support for R&D for ocean energy through its support for the Marine Renewable Energy Ireland (MaREI) Project, co-ordinated by UCC and funded under Science Foundation Ireland (SFI) Centres Programme.

AN OVERVIEW OF THE INNOVATION BUSINESS IS AVAILABLE [IN THE ANNUAL REPORT HERE](#)

NOVUSMODUS

Novusmodus, ESB's clean technology fund, is developing its portfolio of investments while also supporting its current investment portfolio (including Aveillant, Helix Power and tenKsolar) as they develop new technologies and business models.

Novusmodus has led a funding round of up to £6.75 million in Aveillant, whose 3D Holographic Radar prevents wind turbines from interfering with airport radar. The investment will allow Aveillant to prove, manufacture, ship and install units of its Holographic Radar, bringing the company into full scale commercial operation.

Wind turbine clutter is one of the largest obstacles holding back wind development in the UK. There is currently more energy capacity being held up in the planning process because of aviation radar than is deployed on the ground.

Aveillant's 3D Holographic Radar seamlessly integrates with existing airport radar and allows it to distinguish between aircraft and wind turbines.



BUSINESS SERVICE CENTRE

2.4.6 BUSINESS SERVICE CENTRE

The Business Service Centre (BSC) is the internal provider of both business and staff services within ESB.

The BSC leads the way in establishing new and more sustainable behaviours by staff in the business. From the installation of water monitoring equipment, to energy efficient lighting, through to significant changes in our IT infrastructure and hardware. A recent project rolled out Thin Client terminals in place of PCs. Thin Clients use 10% of the energy of a PC, have a longer life cycle, use 82% less materials than a PC and are 90% recyclable. The 2,000 thin clients installed will produce 6.8 tonnes less waste than standard PCs. The Thin Client project was recognised for its innovation and sustainability impact with a Business Unit Sustainability Award in 2013.



Lenny Walsh and Dermot Mangan (both BSC & Electric Ireland), winners of the Business Unit and Merit Awards for Thin Client and Managed Print.

THE BSC LEADS THE WAY IN ESTABLISHING NEW AND MORE SUSTAINABLE BEHAVIOURS BY STAFF IN THE BUSINESS



Representatives on behalf of ESB presenting decommissioned desktops and laptops to Mark Fox of Camara. (Pictured l-r) Peter Morgan (Sustainability Manager, BSC & Electric Ireland), Mark Fox (Business Development Manager, Camara), Lorna Davey (Windows 7 Project Manager, BSC), Liam Molloy (IT Manager and CIO, BSC) and Keith Gibbons (Project Manager, Tomorrow's World).

THE BUSINESS SERVICE CENTRE (BSC) IS THE INTERNAL PROVIDER OF BOTH BUSINESS AND STAFF SERVICES WITHIN ESB.

ESB has ambitious plans to be Ireland's foremost energy company competing successfully in the all-islands market, by bringing sustainable and competitive energy solutions to all our customers. The BSC is key to enabling ESB to achieve these strategic objectives by providing sustainable and competitive support solutions to the business and our staff. The BSC works in partnership with business units to ensure business needs are met in an efficient, sustainable and affordable way. The centralisation of services enables the BSC to provide a consistent level of customer service and increase the volume of self-service through the ESB intranet.

OUR SERVICES ARE:

HR Operations <ul style="list-style-type: none"> ▪ Recruitment and Staff Development ▪ Employee Wellbeing ▪ Safety and Sustainability ▪ Medical Provident Fund ▪ HR Information and Services 	Finance Operations <ul style="list-style-type: none"> ▪ Requisition to Pay ▪ Accounting and Reporting ▪ Governance and Process Improvement ▪ Procurement and Vendor Management ▪ Group Tax ▪ Treasury Operations
ITS <ul style="list-style-type: none"> ▪ IT Governance and Strategy ▪ IT Service Delivery ▪ IT Project Delivery ▪ IT Service Support 	Services <ul style="list-style-type: none"> ▪ Group Property ▪ Legal ▪ Insurance ▪ Customer Service Centre
Pensions	

STAKEHOLDER ENGAGEMENT

2.5 STAKEHOLDER ENGAGEMENT

Maintaining good relationships with our stakeholders to promote ESB’s sustainability story as well as contributing to the ongoing debate about Ireland’s energy future is a key ambition for ESB. As a leading player in the Irish energy sector, we have a requirement to engage extensively at a strategic and operational level with a broad range of stakeholder groups.

Our stakeholder engagement process takes place on a number of strategic and operational levels across the ESB Group of businesses. Due to the broad nature of our business activities, individual businesses engage with stakeholder groups via consultation processes, meetings, industry fora, facilitated engagements and one on one sessions.

The objectives in engaging with our stakeholders are:

- To ensure that our key stakeholders are aware and kept up to date on ESB’s progress
- To listen to the concerns and issues of key stakeholders around in order to address them through our operations
- To build confidence and trust amongst stakeholders in ESB and to demonstrate that ESB is a responsible organisation
- To further develop the relationships that we have with key stakeholders on policy, regulatory, operational and future market issues.

An early draft of this report was circulated to a number of key stakeholders to illicit feedback.

Emanating from our stakeholder engagement activities, the materiality matrix in Section 1 highlights the most material issues for ESB and our stakeholders. The content of the sustainability report seeks to outline how we are addressing these issues in practice.

THE KEY STAKEHOLDER GROUPING WE ENGAGED WITH DURING 2013 ARE OUTLINED BELOW:

Stakeholder group	Means / type of Engagement	Subjects of Engagement	Most Important issues resulting
Key Ministers & Government Departments, Policymakers (DCENR, DoE)	1 on 1 meetings, policy meetings, consultations	Energy policy, policy and regulatory issues, regulatory consultation processes, strategy	Energy policy, maintaining financial strength
Regulatory Bodies (CER, UREG, EPA, HSA, DoE, NPWS, SEA)	Price review meetings, regular scheduled meetings, programme meetings, partnerships	Setting and compliance with licence and permit conditions, pricing and price reviews, work programmes, planning issues	Electricity price, legal compliance, delivery of work programmes, revenue levels, emissions, public safety
Network Operators (Eirgrid, SONI, National Grid)	Scheduled meetings, planning process	Grid connections, work programmes, planning, facilitating renewables	Renewables, network stability, continuity of supply
Industry NGO’s (Eurelectric, IBEC, AEP, IETA, EAI)	Consultation processes, programmed meetings	National and EU energy policy, climate and sustainability policy development, consultations	Policy positions, global climate change issues, competitiveness, security of supply
Sustainability / non industry NGO’s (BITCI & NI, CDP, IIEA, IWEA, IFA, Coillte)	Scheduled meetings, focus groups, member fora, surveys	Land access, work programme, CR programme, performance disclosures	Emissions, corporate responsibility, renewables, planning
Environmental Authorities (EPA, SEAI, DoE)	Licencing process, ongoing dialogue, formal compliance reviews	Licence conditions and compliance, Annual Reporting, dealing with breaches and complaints	Legal compliance, water conservation, energy efficiency, waste
Engineering & Scientific Research (UCD, ERC, UL, DIT, TCD, NUI, EPRI, SEAI, VGB)	Industry fora, partnerships, conferences, technical collaborations, ongoing dialogue	Technology, skills pool, research partnerships, technology deployment	Technical innovation, market disruption, energy efficiency, availability of suitable skills
Public representatives, local authorities,	Scheduled meetings, planning process, ongoing dialogue	Planning concerns, building community support	Community engagement, legal compliance
Ratings Agencies	Scheduled review meetings	Economic performance, performance to plan, strategy, funding rounds, growth programme	Rating, ability to raise debt at manageable interest rate, financial performance
Staff	Team and 1 to 1 meetings, surveys	Business performance, safe working environment, fair employment and trading practices	Staff engagement, reward and recognition, development
Customers (domestic, commercial, industrial)	Social media, customer contact centres, surveys, via business development team	Price, continuity and quality of supply, energy efficiency services, disconnections	Energy price, disconnections policy, energy efficiency
Suppliers (initial focus contracts > €5m)	Tender process, contract review meetings, preliminary market consultations, meet the buyer events	Contractual terms & conditions corporate social responsibility, sustainable procurement opportunities / initiatives, contractor employments standards compliance	Contractor employment standards compliance, sustainable procurement opportunities / initiatives.

PROCUREMENT

2.6 SUSTAINABLE PROCUREMENT

ESB continued during the course of 2013 to build on its commitment to purchase supplies, services, and works in a way that achieves value for money on a whole life basis and generates benefits for the company and society, while having due regard to the environment and all applicable laws and regulations.

A cross functional approach to the assessment of Supply Chain Risk is considered prior to going to market for all significant contracts and appropriate measures built into each contracting strategy to address/minimise all relevant operational & compliance risks, potential business continuity issues and socio/political risks.

ESB contracts forward its base coal usage, which is purchased via intermediaries. When ESB enters into contracts with such intermediaries, it highlights compliance with applicable legislation, the UN Global Compact and anti corruption as some of the minimum standards expected of ESB contracting partners.

The key objectives delivered in 2013 included:

- The continued use / development of life cycle costing for all significant contracts
- The development of a 4-year sustainable procurement roadmap with specific targets for:-
 - Capability Development
 - Procedures & Guidelines
 - Process & Systems
 - Contracts & Suppliers.

- The piloting of electronic tendering as a long-term replacement for paper based tendering.

Significant progress was also made in 2013 on developing an ESB Supplier Charter and a supporting Requirements for Third Parties document which sets out ESB expectations in relation to how we expect our vendors to conduct their business operations from a health & safety, environmental, ethical, and governance perspective.

In the area of Contractor Employment Standards, we continue to undertake audits and contractor sign-offs to ensure application of these standards on all contracts that require the provision of labour.

CASE STUDY

SUSTAINABLE PROCUREMENT IN PRACTICE

The ESB Networks Distribution & Customer Services (D&CS) business, Midwest Region brought sustainable practice to the heart of their operations when deciding to reuse, rather than procure equipment. The refurbishment of MV Transformers in Interface Transformers and Magnefix Unit Subs, for reuse on the Network has brought real savings in environmental and monetary terms.

Interface transformers (IFTs) are used as an electrical interface between 20kV and 10kV Networks. IFT transformers from previous 20kV Conversions were available for potential re-use, but newer switchgear and protection systems required more space in IFT cabinets.

Magnefix unit subs used in urban areas to supply electricity are compact units, so asset replacement can be difficult as available space is limited. Newer type switchgear also requires more space in the Magnefix cabinet.

Both transformer types would be designated scrap if not reused. The solution implemented by D&CS was to dismantle transformer



A retrofitted transformer cabinet with the additional space for fitting of new protection equipment.

assemblies and engage an engineering firm to fabricate newer larger cabinets that would house new switchgear and protection equipment. The project is an ideal example of the Reuse-Reduce-Recycle principle producing savings of €100k per IFT and €20k per Magnefix unit sub. To date 10 IFTs have been refurbished on the system saving €1 million. A further 11 suitable IFTs

have been identified for the 2014 programme alone, with a potential saving of €1.1 million. There are approx. 1,000 Magnefix unit subs on the network, providing a potential savings of up to €20 million if the project is progressed. Apprentices were specifically engaged to work on the project which enables them to gain an appreciation of sustainable work practices.



03 SAFETY, HEALTH & WELLBEING

Safety, Health & Wellbeing Impacts and Opportunities		
Topic	Progress to 2013	Future Objective
Policies and Procedures	Health & safety policies and procedures embedded throughout ESB.	Continue to refine and update in line with changing legislation.
Safety Assurance	Safety Management Systems certified to international standards. Annual safety reviews undertaken across all business units.	Continue to maintain SMS certified international standards. Develop Safety Assurance process in each business unit.
Zero Harm Environment	Significant reduction in Lost-Time Injuries over last 15 years.	Continue to focus on both lagging and leading indicators and implementation of new EHS system.
Safety Culture	Roll-out of the 4-You Behavioural-Based Safety Programme in Generation and Wholesale Markets.	Roll-out of the 4-You programme in Networks business.
Safety Leadership	Development of Safety Leadership Strategy with focus on Leadership, Compliance, Competency and Engagement.	Continue to use Safety Leadership model to drive improvement in safety performance.
Health & Well-being	Health and Well-being Programme in place to assist staff in maintaining a healthy lifestyle.	The development of a new Health & Well-being service focussed on family, personal growth, mental health, physical health and financial health.

3.1 OVERVIEW

We in ESB are fully committed to protecting the health and safety of our colleagues, contractors, and the people we serve. Safety is a core value of our company and we will always put the safety of staff, contractors, customers and public first, relentlessly pursuing our goal of zero injuries and incidents. Our belief is that all unsafe acts and incidents are preventable and all operational processes can be designed and operated in an inherently safe manner. This belief guides our approach to safety across all of our business activities and we take pride in our safety achievements.

We promote an open and proactive health and safety culture with the full involvement of all our people. This is reinforced through strong and visible leadership and by striving to achieve and maintain our safety goal of zero harm. We are aware that safety is every individual's responsibility. Each of us has the responsibility to act immediately to prevent unsafe acts. We comply with, and constantly aim to exceed, all relevant legal and regulatory health and safety requirements. We communicate the required safety standards and behaviours in a clear and unambiguous manner, with all necessary training, systems, and procedures put in place to support and continuously audit our safety performance.

ESB rigorously enforces its safety policies and standards to achieve its ultimate target of zero harm. An extensive safety leadership programme, fully supported by the Board and Management, is in place throughout ESB to address key safety issues. Staff and management at all levels are involved in undertaking safety audits and reviews. In relation to public safety, ongoing media and direct marketing campaigns are run to increase public awareness of the risks and dangers and ESB has developed a strategic partnership with the Health and Safety Authority and other key stakeholders to improve electrical safety in the construction and agricultural sectors.



Reflecting on Safety

HEALTH AND SAFETY PERFORMANCE

3.2 HEALTH AND SAFETY PERFORMANCE

Our performance in 2013 was overshadowed by the tragic fatalities to two of our colleagues in 2013. Shane Conlan died while working at Finglas 38kV substation on 15th January and Oisín Crotty died in a car accident while travelling to work on 17th January. Although the death of Oisín Crotty is not regarded as a workplace fatality, any fatality associated with our business, whether a staff member, contractor or member of the public is deeply regrettable. Both tragedies were felt deeply throughout ESB and served to reinforce our focus on safety as a core value across all areas of our business.

The subsequent thorough investigation into the death of Shane Conlon highlighted that there were a number of aspects of our safety management in ESB that needed a renewed focus and effort.

SAFETY PERFORMANCE ESB GROUP	2012	2013
Staff Fatalities	0	1
Contractor Fatalities	1	0
Staff LTIs	23	29
Contractor LTIs	14	14
Safety Management System coverage	100%	100%
P1s (High Potential Severity Incidents) (excl NIE)	252	279
100% OHSAS 18001 or equivalent certification	85%	>90%
Absenteeism Rate - (average days/staff)	7.14	7.77
Days lost due to occupational injury	831	612

CASE STUDY

ESB TELECOMS 10 YEARS WITH NO LOST TIME INJURIES

ESB Chief Executive Pat O'Doherty presented ESB Telecoms Ltd with an award for successfully achieving 10 years free from lost time incidents (LTIs). ESB Telecoms has five main contractors appointed to build and maintain Towers and Fibre Network. All contractors must meet ESB Telecoms Contractor Approval Policy where their competency and training records are assessed prior to approval and contractors employees are required to complete a one-day safety induction course which is refreshed every three years. Since the inception of the business ESB Telecoms has maintained an accident free record for over 10 years (3,890 accident free days to date). In addition ESB Telecoms achieved OHSAS 18001 certification in 2009 covering over 500+ telecommunications sites and the National Telecoms Fibre Optic Network and this has been retained on an annual basis ever since. Key to managing safety in ESB



Pictured (l-r) are Pat O'Doherty, ESB Chief Executive; Peter Gregg, Safety Manager ESB Telecoms Ltd.; Ronnie Horan, Infrastructure Manager ESB Telecoms Ltd and Pat Naughton, Executive Director Group People & Sustainability.

Telecoms is a Safety Extranet which is a web-based contractor Safety Management System. The application allows contractors to submit online work requests, maintain contractor records and fulfil all legal requirements with regard to safety files and documentation for each site including risk assessments. A comprehensive suite of safety

guidelines, procedures and work aids help to ensure that work is undertaken safely on all ESB Telecoms sites. Over 3,500 work submissions are reviewed annually by the Operations Team to agree the method of work and the safety team verifies that all hazard controls are in place prior to approving a Permit to Work.

HEALTH AND SAFETY POLICY

The outcome of the thorough investigation of the incident was communicated throughout ESB. A new safety organisation has been put in place in ESB Networks to deliver on the recommendations and these are being progressively implemented in ESB Networks with regular updates to the Executive Director Team.

Over the last 15 years, ESB has worked hard to reduce the number of Lost-Time Injuries (LTI) to staff and contractors from a high of over 300 LTIs in the mid-1990s to 43 LTIs in 2013. All injuries to members of staff or to contractors engaged by ESB involving an absence of more than one day from work (excluding day of incident) are reported to the Chief Executive within 24 hours. A full investigation is carried out on each incident to ensure all learning is captured and actions implemented. ESB also complies with all statutory obligations regarding the reporting of accidents, injuries and dangerous occurrences to Health and Safety Authority (Republic of Ireland), Health & Safety Executive (UK) or equivalent bodies in other jurisdictions of operation.

Against a background of significant organisational change many parts of ESB maintained another injury-free year however regrettably there was an increase in the overall number of staff and contractor LTIs in 2013 (43) as compared to our performance in 2012 (37). All of our Lost Time Injuries were of low to medium severity with the most prevalent causes continuing to be slips and trips, handling and lifting and tools and equipment.

ESB categorise injuries and near-misses (incidents that are of concern but did not result in injury) according to the severity of injury or potential severity in the case of near-misses. The system of rules applied in recording and reporting accident statistics is outlined in a Group Safety Incident Reporting Policy. This has enabled ESB to focus on and investigate through root-cause analysis high-potential incidents as another leading indicator of safety performance in the business. In recent years, ESB increased its focus on encouraging reporting and investigation of high potential incidents recognising the significant risks associated with electricity and driving. The reporting and categorisation of safety incidents has led to

The overall Group objective is zero harm.

improved shared learning across the business areas.

Investigation of high potential severity incidents in order to prevent their becoming future injurious incidents will be a key area of focus for 2014 as we continue our objective of achieving zero harm to staff and contractors. Electricity, driving and working at heights continue to be the main risks giving rise to high-potential near-miss incidents in ESB and we continue to focus on these and other risk areas on our journey towards a zero harm environment.

3.3 HEALTH AND SAFETY POLICY

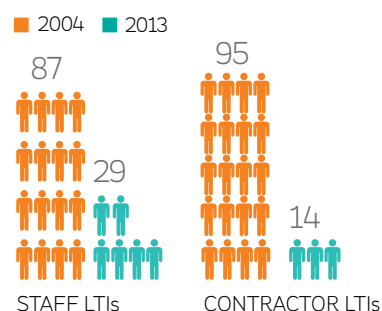
ESB commitment to health and safety is described in our ESB Group Policy and Framework Safety Statement. This Policy Framework was updated in December 2013. This is further described in individual business unit safety statements or safety policy manuals.

The overall Group objective is zero harm. Achieving this requires the full understanding by everyone in the Group of their safety responsibilities and their commitment to fostering a pro-active safety culture, based on a duty of care for themselves, their co-workers and members of the public. Responsibility for safety in ESB proceeds from the Board through the Chief Executive, to all senior management and in turn to each manager, supervisor, team leader, and member of staff.

The Board has in place a Committee on Health, Safety and Environment which considers and reports on matters of policy, strategy and performance in relation to health and safety. Specific requirements regarding safety is included in managers' performance targets.

It is the responsibility of all line management to ensure that employees are trained and motivated to comply with ESB safety policy, safety statements, safety rules and procedures, safety standards and relevant laws. Line management also has a responsibility to keep itself fully informed of the impact that activities under its control have on safety

NUMBER OF LOST TIME INJURIES (LTIs)



policy, and to take corrective action as appropriate. Equally all employees have a responsibility to protect their own safety and that of others affected by their work, to avoid behaviours that could result in injury to others and to cooperate in implementing the safety policy, rules, standards, procedures, guidelines and codes within ESB.

3.4 SAFETY MANAGEMENT SYSTEMS

All ESB businesses have a safety management system in place. In the Republic of Ireland, the majority of our safety management systems are certified to OHSAS 18001 standard and are subject to annual independent audit. In Northern Ireland NIE's SMS is based on the 2014 guidance issued by HSE and the Institute of Directors. As part of each safety management system, each business of ESB Group provides the resources, systems and controls necessary to manage and conduct work activities in such a way as to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all staff and any other persons at the work location.

To ESB's knowledge there are no current or pending legal actions against it in respect of any breaches (or alleged breaches) of health & safety laws.

PUBLIC SAFETY

3.5 PUBLIC SAFETY

Delivery of the network refurbishment programmes continued to have a significant and beneficial impact on public safety. The main focus of ESB's public safety programme concerns the management of the risk of people coming into contact with ESB's network, plant and equipment. We also rigorously address the risks arising from our generation activities, in particular head and tail races associated with hydro-electric power stations. ESB plant and equipment is operated in line with international standards and legislation, including standards dealing with the risk of harm associated with electric and magnetic fields.

Regrettably, there was one fatality from contact with electricity on the customers' side of the meter during 2013. The total number of electrical fatalities for the 10 year period from 2004 to 2013 is 27 (15 of these were on the networks side of the meter and 12 were on the customers side). While ESB is not responsible for public safety in people's homes, we deliver regular public safety campaigns to alert the general public to the potential dangers posed by electricity. In addition, many of the network refurbishment programmes which continued to be delivered during 2013, have a significant and beneficial impact on public safety.

The issue of metal theft including unauthorised break-ins to ESB Networks' and NIE substations poses a significant safety risk to the individuals involved. This mirrors the overall national trend of increased metal theft over the last number of years. In addition to the public safety risks associated with this activity there are also significant additional negative impacts and costs arising from increased security measures, damage to equipment, environmental damage and clean-up costs due to oil spillages and disruption to work programmes. ESB Networks and NIE continue to monitor closely the level of security incidents to assess the level of risk pertaining to various substation sites. This also assists in deciding on required mitigation measures for same, such as mobile monitoring systems.



Primary school students in Cork City meeting Tom Power, Customer Services Supervisor Cork.

Throughout 2013 ESB Networks continued to meet its obligations and responsibilities for public safety by implementing ESB Networks' Public Safety Plan (2013-2015) with initiatives aimed at the "at-risk" groups, including construction, farming, leisure and children. Public safety programmes for children included both school visits and promotion of the child-appropriate public safety content on the ESB internet site. Public safety information was also provided through the National Contact Centre, with safety booklets and other content mailed in response to specific requests.

Advertising promotional activities in 2013

- Advertising in the national and technical press promoting awareness of the dangers from contact with ESB Networks electricity infrastructure.
- TV advertising in the national agricultural livestock marts aimed at the farming community.
- Broadcasting of full range of public safety radio advertisements on local and national radio stations.
- Participation at the National Ploughing Championships in September, in conjunction with the Health and Safety Authority.
- ESB Networks continued their support of the KEEP SAFE Programme for 5th and 6th Class primary school children in association with the Health and Safety Authority and other national bodies, coordinated by Junior Achievement Ireland.
- NIE Kidsafe interactive safety programme delivered to Key Stage 2 school children across Northern Ireland.

3.6 DANGEROUS OCCURRENCES IN 2013

The table below reports on the number of dangerous occurrences associated with the distribution network infrastructure in Republic of Ireland over the past 5 years. These figures are broken down as third party damages¹ and non-third party notifiable fault incidents².

Types of Dangerous Occurrence	2009	2010	2011	2012	2013
Safety incidents on the network ³	265	211	205	854	1214
3rd Party plant damages (excluding underground cable dig-ins)	802	585	627	816	980
3rd Party plant damages caused by underground cable dig-ins	178*	167	134	121	245
Non 3rd party – MV and 38kV notifiable fault incidents (e.g. line drops)	676	552	560	844	1410

¹Third party damages are incidents where third parties cause damage to the networks infrastructure. These are broken down into incidents that involve damage to underground electricity cables termed 'Dig-Ins' and incidents that cause damage to other plant such as overhead lines, mini-pillars and substations.

²Non-third party notifiable fault incidents are principally incidents on the overhead lines networks where an overhead line conductor / wire falls e.g. in stormy conditions or due to corrosion or other plant item failure.

³Improved reporting in recent years has led to a more complete reporting on the incidence of dangerous occurrences

SAFETY LEADERSHIP

CASE STUDY

KIDZSAFE LAUNCH LISBURN

Kidzsafe is NIE's interactive safety programme, designed to educate and raise awareness of the dangers of the electricity network to Key Stage 2 pupils throughout Northern Ireland. The aim is to reduce electricity related injuries and incidences of vandalism.

Through Kidzsafe, NIE safety experts visit schools and community groups, and during term time take part in the inter-agency Bee Safe Initiative which operates across Northern Ireland.

Kidzsafe allows parents, teachers and children to learn together using online fact sheets and interactive games as well as school talks and demonstrations. There is a dedicated Kidzsafe section on nie.co.uk as well as media campaigns during the year.

In 2013 the Kidzsafe programme was delivered to over 15,000 school children across Northern Ireland.

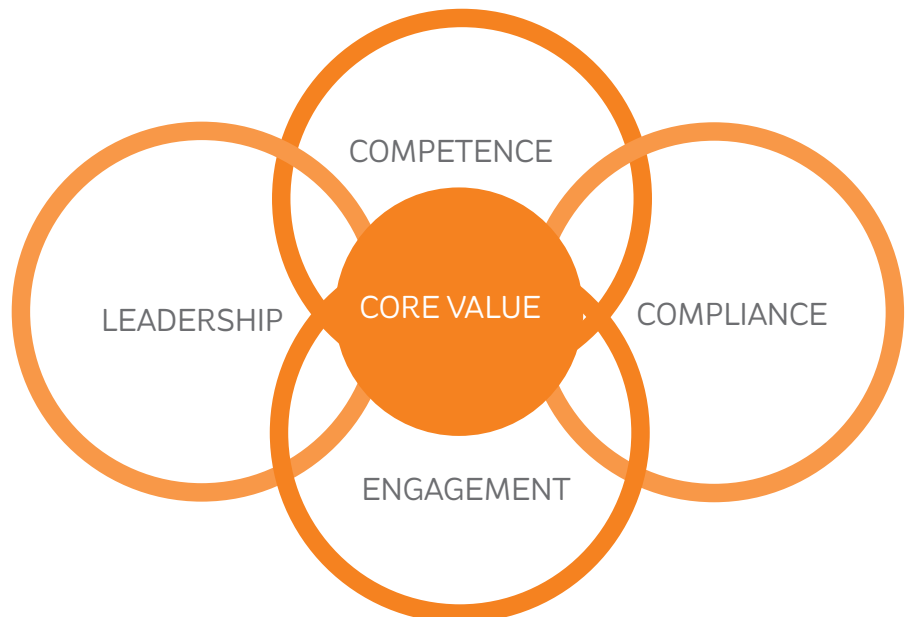


NIE's Margaret Gallagher and Stephanie McCullagh launch Northern Ireland Electricity's Kidzsafe programme with a little help from P7 pupils at Forge Integrated Primary School in Belfast.

3.7 SAFETY LEADERSHIP

In 2013 the Executive Director Team established a Safety Leadership Group to compare our approach with external best practise and to make recommendations as to how ESB could further improve its safety performance. The Safety Leadership Framework has four key pillars: Leadership, Competency, Compliance and Engagement which describe at a high level the areas of focus in order to maintain a safe place of work and ensure a consistent approach across ESB recognising that safety is a value and not just a priority. Under each of these pillars a set of 12 Guiding Principles further articulate our safety expectations. The new Safety Leadership Framework is 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. Each business unit has adopted the Safety Leadership Framework in developing their Safety Improvement Plans for 2014 and has developed Safety Leadership Plans to align with the Safety Leadership Framework.

SAFETY LEADERSHIP



CONTRACTOR SAFETY

3.8 ANNUAL SAFETY REVIEW

All ESB businesses are subject to at least annual management review of health and safety. From this review the following years Safety Improvement Plan is developed and targets agreed. This is then monitored at regular intervals as part of the safety management system. An overall end of year safety review took place on December 12th at which each business senior management team presented on its safety performance for 2013 with all members of the Executive Directors Team in attendance. This forum enables all senior management teams to share knowledge, learning and experience on common safety challenges for ESB.

3.9 SAFETY STRATEGY IN ESB NETWORKS

Following the fatality of Shane Conlon, ESB Networks have implemented a number of initiatives in 2013 aimed at re-enforcing safety as a value throughout the Networks organisation.

These initiatives include:

- A new safety organisation to support the Safety Strategy
- Management Safety Leadership sessions for all senior managers
- Safety Leadership as part of the Performance Management Process
- A new Materials Introduction Board to validate, approve and control new plant and materials
- Development of a new independent specialist audit function covering competency, compliance and behavioural audits
- Development of Annual Technical Training Plan for all Network Technicians
- Development of a new Job Site Safety Plan and new LV Commissioning procedure
- Safety Engagement Plans for all managers and staff covering safety leadership and behavioural safety.

3.10 CONTRACTOR SAFETY MANAGEMENT

Safety management of contractors remains a key area of focus for ESB to ensure that each contractor and sub-contractor, working for or on behalf of ESB is properly inducted and that each contractor operates under a safe system of work. This is supported by contractor safety management



Jon Taggart and Derek Gallagher, both Coolkeeragh ESB with various contractors during the Fuel Gas Heat Exchanger Inspection.

processes in each business area. Our focus is on ensuring that all large contractors working on behalf of ESB have a safe system of work with evidence available to demonstrate this.

Specific activities undertaken in 2013 include:

- Regular reporting of contractor performance
- Induction of all contractor staff
- Training for ESB staff in managing contractors
- Reducing the number of contractors working on behalf of ESB by consolidating service delivery to improve safety performance
- An emphasis on behavioural safety
- Sharing knowledge and experience of Contractor Safety Management tools and systems through ESB.

3.11 4YOU PROGRAMME

The human factor component of incidents has become increasingly prevalent in the incidents reported in ESB over the past five years (e.g., communication, supervision, attention, stress and fatigue, safety culture, violations, unsafe behaviours). The 4You programme has been developed as a preventive approach designed to tackle the human factor and behavioural component of safety in ESB.

During 2013, significant work was undertaken to develop the leadership aspects of the programme, as well as continuing the roll-out of the programme in the Generation and Wholesale Markets business.

3.12 SAFETY AUDITING

Our risk assessment and behavioural audit systems are a key part of our overall safety management systems and provide valuable learning and insights for management and staff as part of continuous improvement on safety.

There are three levels of auditing undertaken in ESB, including:

- system audits to determine appropriateness and effectiveness of safety management systems;
- audits of locations to determine if staff or contractors are working in a safe environment and the public are sufficiently protected from harm from our activities and
- audits of tasks, activities and behaviours to determine if staff and contractors are working safely.

Details of audits are recorded on a corporate safety auditing system. In 2013 nearly 5,000 audits were conducted across all areas of ESB activities.

ROAD SAFETY

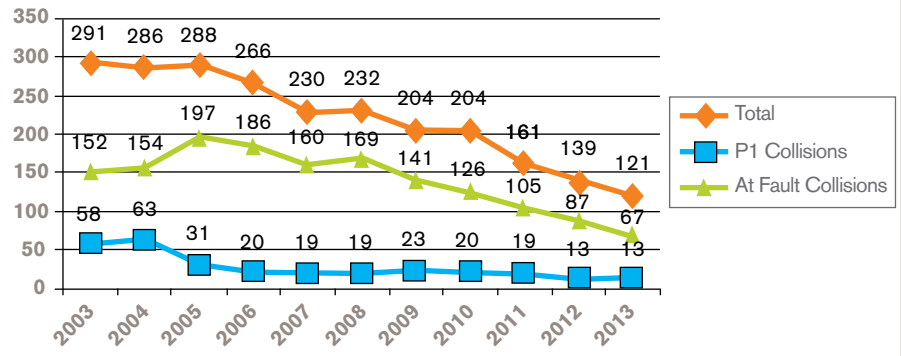
3.13 DRIVING

ESB's commercial fleet consists of over 2,000 vehicles and more than 2,000 of our staff drive their own cars on ESB business – in 2012 the total mileage for these fleets was 67 million kilometres. ESB recognises that driving for work, and other activities on our roads and workplaces represent a significant risk.

ESB's first Safe Driving programme 'Safe Driving – It's my responsibility' spanned 2004 to 2008. This programme implemented safe driving policies, advanced driver and specialist vehicle and equipment training, vehicle specification and safety checks, and incident reporting in order to capture and analyse collision information. In 2008 the Safe Driving programme was reviewed and a reinvigorated programme, 'Achieving Road Safety Excellence', was developed for implementation during 2009 to 2011. This second programme built on the achievements of the previous programme with the following aims as a leading best practice employer in Safe Driving. Both programmes proved successful for the organisation, not alone in terms of the safety of our staff, but it also built on the reputation ESB has for implementing best practice in road safety.

On 5th December 2013 ESB launched its 3rd Road Safety Strategy 'ESB Road Safety Strategy 2013 –

TOTAL, P1 AND AT-FAULT COLLISIONS 2003-2013



2020: Our Journey to Excellence'. This strategy builds on the previous strategies and aims to position ESB as a national exemplar in Road Safety Excellence through achieving zero at-fault incidents and collisions by 2020. To achieve this vision, all management and staff must be advocates of safe driving practices for their work colleagues, their families and the wider community. The new strategy has the leadership of the Executive Director Team to provide direction, resources and oversight for its delivery. It will be supported and implemented by the Road Safety Steering Group, Business Line Managers and the Road Safety Bureau. The strategy will see continued collaboration with the Road Safety Authority, the Health and Safety

Authority, An Garda Síochána and the European Transport Safety Council. This strategy takes account of the extent to which the objectives of the previous Safe Driving Strategies were achieved, and is about achieving a cultural shift in the organisation where you will see a move from an initiative-based programme to a culture-based programme with a longer term vision.

In 2013 ESB reduced overall collisions to the fleet to 121 a reduction of 58% since 2003. In addition, ESB has reduced the rate of serious collisions (P1 Collisions) and ESB Driver-At-Fault collisions over this time.

CASE STUDY

'BE SAFE, BE SEEN'

RSA AND ELECTRIC IRELAND DISTRIBUTE 85,000 HIGH VISIBILITY VESTS TO JUNIOR INFANTS.

In 2013, 85,000 children learnt the important message of high visibility through the Road Safety Authority and Electric Ireland partnership to provide every child starting school with a high visibility vest.

This was the fourth year of Electric Ireland sponsorship for this important road safety initiative.



Pictured is Jim Dollard, Executive Director BSC and Electric Ireland with Michael Rowland, Director of Road Safety Research and Driver Education, Road Safety Authority.



Left: Some Electric Ireland staff volunteered to deliver high visibility vests to their local schools. Pictured above is Sandra Thompson who delivered to Scoil Naomh Mhuire, Donore in county Meath.

SAFETY COMMUNICATIONS

3.14 SAFETY COMPETENCY

ESB is committed to establishing and maintaining appropriate safety competence in the organisation. Since establishing a dedicated Certificate in Safety and Health at Work with University College Dublin, a total of 401 ESB staff and managers have successfully completed the course.

3.15 SAFETY COMMUNICATIONS AND ENGAGEMENT

ESB has formal agreements in place with trade unions covering all aspects of health and safety responsibilities of ESB and staff.

All ESB staff are represented in formal joint management-worker health and safety committee structures that monitor, advise and respond to health and safety matters. Health and safety issues are discussed through an extensive system of safety representatives, safety committees and safety forums throughout the business. All staff have the right to appoint a safety representative and a week-long training programme for Safety Representatives is held each year. Each business area or location has joint staff/management safety committees where health and safety issues are discussed and addressed in a partnership approach. Each business unit has an overall health and safety committee which is attended by the relevant Executive Director and where safety matters are discussed.

The Chief Executive chairs the Chief Executive Health and Safety Committee, with representatives from each business unit, Group of Unions, Board Health Safety and Environment and Executive Director Team. The Committee visits different locations to engage with staff on safety matters and in 2013 the Committee visited Aghada Power Station in Cork and Networks Rosbrien Depot in Limerick.

Our risk assessment and behavioural audit systems provide further opportunity for direct input on safety by staff. The outcome of these measures is reflected in our recent staff engagement survey results, which show that

78% of staff were satisfied with ESB's overall approach towards health and safety. This compares very favourably with external benchmarks.

3.16 PREVENTION AND RISK CONTROL

ESB places a strong emphasis on the prevention and control of risk in the workplace. We have an extensive range of policies and procedures in place including detailed risk assessments covering all areas of risk and provide information in a form, manner and language that is likely to be understood by staff and contractors. We also believe that the concept of prevention and control of risk is relevant to staff both in and outside of their work environment. We view Risk Assessment techniques as a "Skill for Life". The measures in

place to prevent and control risk include hazards and risks identified through risk assessments and protective and preventive measures to be taken during each specific task to be performed at each place of work. We promote an open engagement with staff in prevention of risk through risk workshops in all locations.

3.17 SAFETY WEEK 2013

ESB supported the 2013 EU Safety Week theme of Working Together for Risk Prevention with a strong emphasis on staff participation in Occupational Safety and Health. ESB highlighted specific risks and hazards such as electricity, risk management and fire to emerging risks such as mental health with a combination of team safety discussions, presentations and other events throughout the company.



Chief Executive Pat O'Doherty and Station Manager Liam Ring pictured with members of CEHSC and Aghada staff on site.

EMPLOYEE HEALTH AND WELLBEING

3.18 EMPLOYEE HEALTH & WELLBEING

ESB is committed to sustaining an engaged and agile workforce. A key element of both our corporate strategy and our corporate social responsibility strategy is our commitment to developing and supporting our staff. Our focus on health (including mental health) and wellbeing is a key element of this strategy.

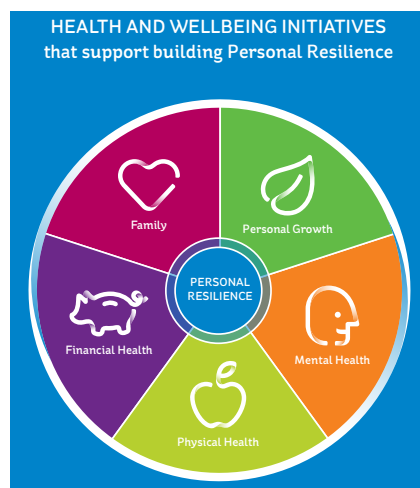
In these challenging times, the aim of the Health & Wellbeing Programme is to provide on-going help and to support staff to take more responsibility for their health and wellbeing so that they can reach their full potential in the workplace and live healthy and balanced lives.

The proactive health and wellbeing programme provides good information, advice and strives to provide the tools to empower our employees in managing their health and well being. Our Health Support Services are focused on providing best practice support to our employees when they experience a personal

problem or challenge. In order to create a better understanding of the programme, a new look and feel was created in the form of 5 key health & wellbeing themes representing different aspects of the programme, mental health, physical health, financial, family and personal growth.

Our focus in 2013 for good health and wellbeing included:

- Nationwide seminars on stress management and financial health offering practical advice to staff on how to manage personal finances and manage stress.
- Monthly health and wellbeing bulletins on various topics under the 5 icons, including mental health, budgeting, healthy eating, exercise, work life balance and time management.
- Developing a health and wellbeing portal as a communications channel for staff without access to personal computers.
- Health screening programmes; cardiovascular, bowel and flu immunisation.



- Making staff were aware of the support services available to them to deal with the challenges and difficulties they may be encountering. Our Employee Assistance Programme (EAP) provides a confidential support to staff in dealing with difficult personal issues.

CASE STUDY

MIND YOUR BUDDY

ESB'S PILOT OF THE PIETA HOUSE "MIND YOUR BUDDY" PROGRAMME

ESB teamed up with Pieta House on a pilot initiative called "Mind Ur Buddy". 11 staff members volunteered and were trained with Pieta House to take on the role of Buddy Support Person (BSP) in order to be able to offer immediate support to any of their colleagues who may be feeling suicidal or acutely distressed. The BSP will meet with/talk to the staff member and explain how the system works. The BSP will have contact details of a designated Pieta House Therapist who will be available to talk with the BSP and take the referral. Pieta House offer a programme of professional counselling.



Buddy Supports Persons pictured (front row, l-r): Mary Gaffney, BSC; Martina Mannix, EAP; Mary Bourke, Castlebar; Orla Gardiner, BSC; and MI O'Brien, Sligo. Second row: Elaine Fey, Electric Ireland; Sharon Hurley Wilton; Cindy O'Connor, Pieta House; Geraldine O'Connor, EAP, Limerick; and Seamus O'Reilly, EAP, Sligo. Third row: Niall O'Connor, EAP, Dublin; Peter Murphy, BSC; Leon Brinkley, BSC; and Fintan Dunne, Portlaoise. Fourth row: David Mitchell, Pieta House; and John Searson, Pieta House.



04 OUR PEOPLE

WORKFORCE

ESB can only deliver world-class networks, a GTS business of scale and sustainable innovation through its people

4.1 OVERVIEW

The scale of the challenges and opportunities facing the energy sector requires new thinking and innovative solutions. New technologies, increased competition and an increasingly sophisticated consumer mean that ESB must innovate faster to remain competitive and to deliver on our strategy and objectives. The changing pace of the industry requires an engaged and agile workforce, that can adapt and innovate in this operating environment.

PEOPLE STRATEGY

ESB's people strategy is gearing the organisation and its staff to rise to this challenge.

ESB GROUP PEOPLE STRATEGY



4.2 WORKFORCE PROFILE

At ESB, we recognise that our people are central to our success. Our Corporate Strategy to 2025 focuses on delivering high performance in business outcomes while also enhancing the employment experience of our people.

STAFF BREAKDOWN 2013

Average Number of Staff	7490**
42% of which are classified as skilled craft and general staff, 58% as non-craft and general.	
Female%	21.1%
Male %	78.9%
% Management Level Female	21%
% Board Members Female	33%
Permanent Contract	89.93%
Temporary/Other Contract	10.07%
Full Time (%)	89.19%
Part Time (%)	10.81%
Staff with Disabilities*	5.3%
* The target set by Government is to achieve a 3% rate of employment of people with disabilities	
** Figures include Northern Ireland Electricity and ESB International overseas staff	

Our People Impacts and Challenges		
Topic	Progress to 2013	Future Objective
Policies and Procedures	HR policies and procedures embedded throughout ESB.	Continue to refine and update in line with changing legislation.
Staff Development	Individual training and development plans in place for staff	Continue to focus on staff development as a source of competitive advantage
Management Development	Senior Leadership and Newly Appointed Manager Programmes rolled-out.	Continue to support and develop our managers in delivering engagement and agility in the workplace.
An Engaged and Agile Organisation	Employee engagement survey undertaken	Continue to focus on engaging staff to embed sustainability
Equality and Diversity	Creation of an inclusive work environment for all staff	Continue to promote awareness and understanding of the benefits of promoting equality and diversity

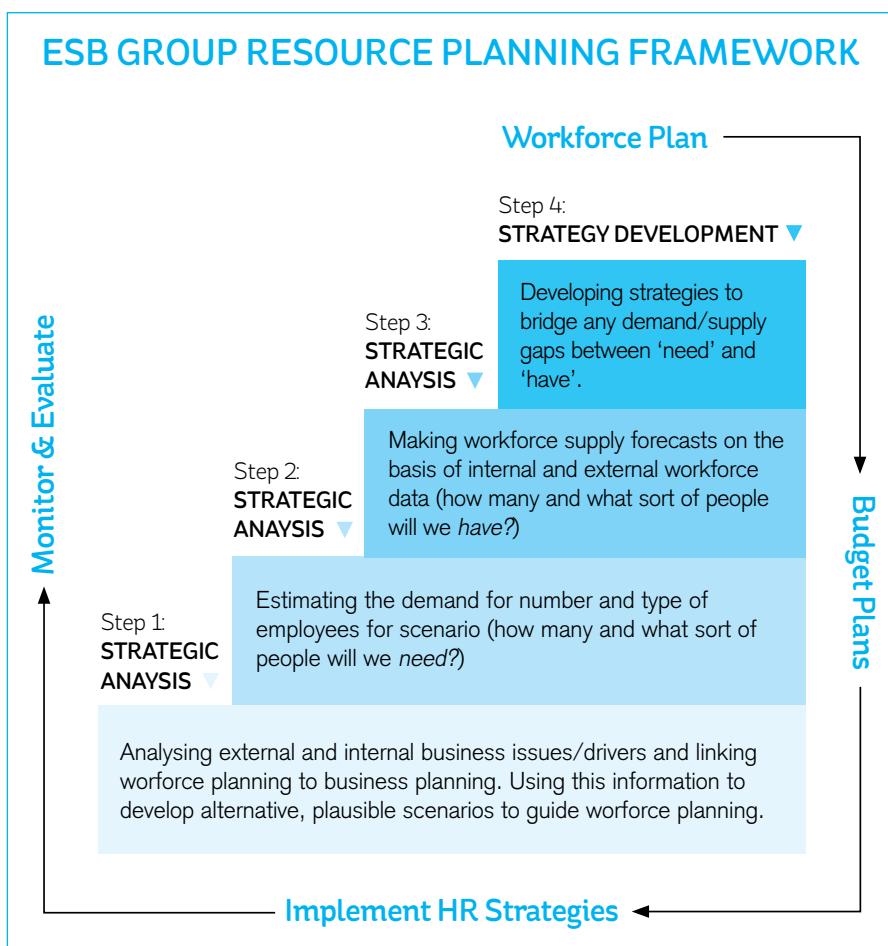
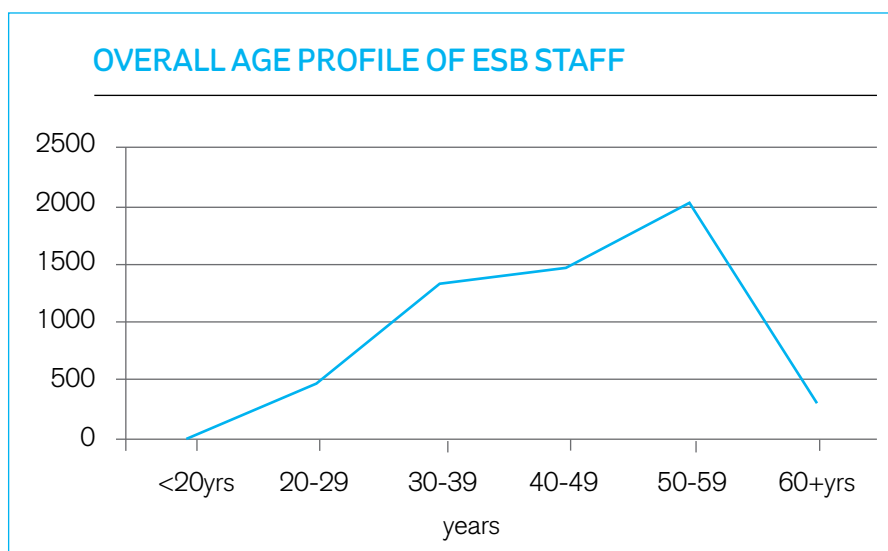
STRATEGIC RESOURCE PLANNING

4.3 STRATEGIC RESOURCE PLANNING

Strategic Resource Planning is carried out on an annual basis within each business line. It involves analysing business issues, needs and drivers to develop plausible scenarios on which workforce planning is based. The resultant workforce demand is developed and compared to the supply and a strategy emerges to address the gaps. As a mature organisation with high staff retention, the key drivers of the workforce gap are:

- New business – as part of the ESB Growth Strategy
- Retirement – over 40% of the workforce over 50
- Capability rebalancing - sourcing new skills to respond to business and technology evolution or new people to provide capability which existing staff are no longer able to provide
- Competency - ensuring ESB has the right skills and experience within the business

Given the maturing profile of staff, ESB also ensures that staff are well informed of their choices and options in moving towards retirement. Retirement planning seminars are run regularly to ensure a suitable discussion forum is made available to inform staff.



CAPABILITY DEVELOPMENT

4.4 ONE HR 'COMBINING OUR CAPABILITY'

One HR is the new way of delivering HR support to the business. As with so many other areas of ESB, HR is changing to provide an enhanced service with fewer people. It aims to be a vehicle for integrated delivery of the people strategy, contributing to the delivery of ESB's overall strategy, through one team, with streamlined processes, delivering excellence.

4.5 CAPABILITY DEVELOPMENT

ESB has recognised the role of managers in delivering engagement and agility in the workplace. We see our managers as key to creating the environment where people can perform at their best and maximise their contribution, while at the same time enjoying the health and well-being that comes from the positive experience of employee engagement. In 2013 we initiated a programme of development for our managers across the organisation and at all levels. The aim of this programme is to develop managers to enable high performance of their teams, through an understanding of the importance of motivation, engagement and communication in the workplace.

During 2013 a total of 33,850 training interventions took place across ESB Group. The planning and delivery of this scale of training and development is facilitated through annual cycles of objective setting and performance management and a training and development process at the level of the individual employee.



Panel discussion taking place at the One HR Conference.

THE FOUR-TIER ONE HR SERVICE DELIVERY MODEL



All staff in ESB Group are subject to regular performance review.

The ESB Networks National Training Centre (NTC) in Portlaoise is a focal point for the delivery of technical training. During 2013, the NTC delivered 1,019 courses to 6,036 staff over 2,037 training days.

ESB promotes continuous professional development to ensure that staff in ESB have the skills and the competence required for individual and organisational success.

4.6 CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

In line with One HR a new cross company CPD committee has been established with the primary role

to educate members of professional bodies on CPD, lifelong learning and reflective practice. The purpose of the new committee is to act as 'the champions' of CPD, answer questions with regard to the roles and responsibilities of all internal parties in relation to CPD, provide a link to professional bodies in relation to CPD benchmarking and to see that the good CPD systems and practices which are put in place are maintained and improved on an ongoing basis across ESB. The CPD Committee began with extensive work on the development of a new group CPD policy and CPD strategy in line with ESB's 2025 strategy.

ESB is an Engineers Ireland CPD accredited company. We recruit engineering graduates each year based on business needs. We also recruit apprentice network technicians.

In 2013, 5 graduates were recruited to NIE and ESB International and a further 30 apprentices joined ESB Networks and NIE.

ESB continues to participate in the Government's national internship scheme, JobBridge, which provides individuals who have been on the live register for at least three months with the opportunity to undertake a quality internship in an organisation in the private, public, community or voluntary sectors for a six or nine-month period. ESB has pledged to provide up to 200 internships throughout the company during the scheme's lifetime. To date we have appointed 100 interns throughout the Company. These placements and the subsequent experience gained has assisted many of the interns to progress into full time employment.

CASE STUDY

NIE FOCUS ON CUSTOMER SERVICE

Winter 2013 brought a renewed focus to customer service in NIE, with around two thirds of NIE staff being trained on how to improve relations with customers. With approximately 840,000 customers, a high level of customer service is a key priority.

The half day course being held across NIE offices brought together employees and



Attendees at one of the courses held across NIE.

managers from the Distribution Service Centre, lines delivery, tree cutting, customer operations, metering and meter readers.

4.7 EQUALITY, DIVERSITY AND INCLUSION

As a leader in the area of equality, diversity and inclusion, ESB is committed to continually promoting a diverse and inclusive work environment, through positive engagement and innovative awareness raising programmes, supported by robust policies and procedures. Respect and Dignity in the workplace is at the core of our business relationships. With a focus on awareness raising initiatives, training and development of managers and staff to fostering positive work environments.

In 2013, ESB's work in the promotion and development of Workplace Mediation was recognised by The Mediators Institute of Ireland. ESB Case Management Model supports early interventions and resolutions of workplace issues.

There are over 60 trained Dignity at Work Contact Persons in ESB whose role is to act as a confidential support for employees. In 2013, ESB joined GLEN's (Gay and Lesbian Equality Network) Diversity Champion Programme, further commitment to working to make our workplaces and businesses LGBT (Lesbian, Gay, Bisexual, Transgender) inclusive from recruitment to services we deliver. ESB also hosted an event to raise the awareness of mental health issues in the workplace.

4.8 EMPLOYEE ASSISTANCE PROGRAMME

ESB's Employee Assistance Programme (EAP) provides professional and confidential support to individual staff members in dealing with personal challenges that arise that can impact on their working and personal life.

The Programme is supported by locally based EAP officers who provide support in a wide range of issues including:

- Mental and physical health challenges
- Work related difficulties
- Financial difficulties
- Relationship issues
- Bereavement & Grief
- Addictive Conditions
- Trauma and Crisis Management.

CASE STUDY

THE ONE HOUR DISABILITY CHALLENGE

1 hour Challenge as a Disabled person was the brainchild of ESB Access Group established in 2013. This very successful initiative had participation and support from EDT and team members. The objective of the initiative was to raise awareness of some of the challenges people with disabilities may face in a workplace setting from environmental to attitudinal issues – in a very practical and fun way. As part of the challenge 27 staff acquired temporary disabilities; 9 visually impaired, 9 hearing impaired and 9 wheelchair bound staff, set about their normal duties with their newly acquired disability and a safety buddy in tow to ensure their safety. Each volunteer was given a task list to ensure a full experience, from



Standing (l-r): Robert Forde, Electric Ireland and Ciaran Ferry, BSC. Seated: Catherine Whyte of the BSC, Corporate Centre Access Officer Niall O'Hanlon, and Catherine Naughton of the BSC.

using software for the visually impaired to interact with the computer to moving about the office and attending meetings. The Challenge was an overwhelming success in bringing a new and better understanding of what it is like to have a disability and the challenges that brings in the workplace. Staff felt challenged by this different approach to disability awareness, so much so that it is planned to repeat the challenge at other major staff locations.

ESB has put in place a Confidential Counselling Support service for staff which is available 24 hours a day, 7 days a week. Staff can discuss any issue in total confidence with a trained counsellor or can be referred to either face-to-face or structured telephone counselling. No information on this service is passed to ESB and the service is free and confidential.

4.9 STAFF ENGAGEMENT

One of the key successes of our initial sustainability programme (2008-2012) is the way staff throughout ESB engaged with the sustainability agenda. This engagement has promoted innovation and fresh-thinking throughout the organisation, as teams and individuals identify new and more efficient ways of working. The involvement of a group of engaged volunteer Champions were the backbone of driving this engagement. Under the new sustainability strategy, promoting a more embedded approach to sustainability has become a greater challenge and will continue to be a focus of the successful delivery of the strategy through ESB staff.

4.10 SUSTAINABILITY AWARDS

Our annual Sustainability Awards recognise significant achievements by teams and individuals in delivering

on the organisations sustainability goals. In 2013 for the first time, we invited staff to submit their entries via video. The medium of video was chosen to enable the submissions to be shared and used as exemplary case studies as to how sustainability is being embedded across the ESB Group. 36 awards entries presented powerful stories about energy efficiencies, cost savings and water savings, covering the reuse of equipment and materials and showcasing new ideas, technologies and solutions. In all cases there was a clear demonstration of embedded sustainable thinking and staff going the extra mile to deliver tangible benefits to the business and the environment.



Sustainability award winners pictured with Chief Executive, Pat O'Doherty and members of the EDT.

4.11 ENGAGEMENT SURVEY

'Have Your Say' Survey

The Have Your Say Survey took place in September 2013. Staff were asked to complete questionnaires online and via paper. 57.7% of staff engaged in the conversation and took the opportunity to have their say.

Staff engagement was measured from 4 angles; my engagement with my job; my engagement with my manager ; my engagement with the organisation; my engagement with my team – which are averaged to arrive at an overall engagement score.



WHAT HAPPENS NEXT?

»»»» Communicate Results Locally »»»»

»»»» Agree Local Action Plan »»»»

»»»» Cross Company Action Plan

TAPLINE RESULTS FROM THE 'HAVE YOUR SAY' SURVEY

WHAT YOU SAID...

ACROSS ESB **71%** OF RESPONDENTS ARE SATISFIED OVERALL WITH THEIR JOBS AND THE SAME AMOUNT ARE COMMITTED TO ESB'S GOALS.

Managers are seen to be caring and supportive of individuals, while some improvement is needed on encouraging career development.

ESB is also seen as an employer committed to safety in the workplace and ESB people perceive their safety, health and wellbeing as individuals, as being important to their managers.

ESB people perceive our workplace as one high on ethics, integrity and mutual respect between peers and between managers and staff.

Only **30%** are happy with the opportunities they have to progress and only **35%** believe the recruitment and selection process in ESB is fair, with just **38%** being optimistic about their own futures in ESB.

43% HAVE CONFIDENCE IN ESB'S FUTURE.



In general there is a strong sense of team across ESB, with a high proportion of staff feeling connected to their teams.

The survey provides lots of scope for focusing on improving life at ESB. Trust and confidence in ESB Senior Management in terms of strategy, communication and change management, has come through as an area that needs attention.

WHILE **60%** OF RESPONDENTS HAVE HAD THE OPPORTUNITY TO DISCUSS THEIR GOALS AND DEVELOPMENT IN THE PAST YEAR, ONLY **40%** RECEIVED REGULAR AND CONSTRUCTIVE FEEDBACK.



Despite low scores in some areas, **80%** of staff that responded remain proud to work in ESB and **74%** would recommend ESB as an employer. These positives provide a great opportunity to work with staff to address the areas of concern raised through the survey.



05 ENVIRONMENT AND CLIMATE CHANGE

ENVIRONMENTAL MANAGEMENT

Impacts and Opportunities for Environment & Climate Change

Topic	Progress to 2013	Future Objective
Policies and Procedures	Environmental policies and procedures embedded throughout ESB.	Continue to refine and update to ensure compliance with legislation.
Environmental Assurance	Environmental Management Systems in each area certified to international standards.	Continue to maintain EMS certified international standards. Develop Environmental Assurance process.
Air Emissions	CO ₂ emissions in 2013 reduced to 9.3 million tonnes from 12.3 million tonnes in 2005.	Continue to reduce air emissions and the carbon intensity of our generation portfolio.
Renewable Energy	Portfolio of 380MW of renewable energy.	Continue to increase renewable energy in line with overall strategy.
Water	Monitoring of water usage levels in place at all major locations.	Continue to reduce water usage across all areas of ESB.
Materials & Waste	ESB Networks achieved over 97% diversion from landfill, NIE a 97% recycling rate and Electric Ireland a 76% recycle rate.	Continue to focus on increasing diversion from landfill with a focus on re-use and re-cycling across all ESB business units.
Carbon Footprint	Our internal CO ₂ footprint has reduced from 45 million tonnes in 2006 to 30 million tonnes in 2013.	Continue to focus on reducing fleet and business mileage and reduce energy consumption in our buildings.
Biodiversity	Biodiversity study completed.	Continue to reduce our impacts on biodiversity.

5.1 OVERVIEW

Current EU policy is to reduce total carbon emissions by 80% by 2050. In the near term, there are also legally binding targets at European and national levels to decrease carbon emissions, increase the proportion of energy from renewable sources and enhance energy efficiency by 20% by 2020. In early 2014, the European Commission announced its intention to extend this ambition to 2030 with a proposal to achieve a 40% reduction in greenhouse gas emissions by 2030.

As climate change becomes an increasingly relevant factor to our business, its impact and how we adapt and mitigate moves centre stage in terms of our proactive adaptation measures and enterprise risk management and the more reactionary crisis and emergency response planning. At ESB we are committed to the highest levels of environmental management and sustainability in all aspects of our operations and we commit to leadership in carbon management and energy efficiency.

5.2 ENVIRONMENTAL MANAGEMENT SYSTEMS

Our Environmental Management Systems provides a structured basis from which to ensure all the environmental aspects of our operations are considered, all impacts assessed and work programmes established to mitigate and minimise our impact.

Under the auspices of our environmental management systems we are committed to:

- Adopting appropriate management structures, management systems and targets to manage sustainability and environmental issues
- Complying with all regulatory, planning and environmental legislation pertaining to our business activities
- Conducting our activities and those of our subsidiary companies in an environmentally responsible manner
- Developing and maintaining effective environmental management systems (EMS) suitably certified to the requirements of ISO14001

- Acting responsibly in our use of environmental resources
- Contributing to environmental and sustainable policy development at national and EU level
- Maximising energy efficiency and conservation in all our activities and encouraging our customers and suppliers to use natural resources in a prudent and efficient manner
- Identifying the environmental impacts associated with our activities and managing them appropriately
- Identifying and managing significant environmental risks and having emergency response plans in place
- Reducing our internal CO₂ carbon footprint by improving the energy efficiency of our buildings, reducing fuel used in our vehicle fleet and promoting sustainable travel for staff
- Reducing water usage, reducing waste streams and increase reuse and recycling in all of our locations.

AIR EMISSIONS



5.3 AIR EMISSIONS

The primary source of discharges to the environment (air, water and land) emanate from our generation activities. These activities, other than those in relation to renewable energy (wind and hydro) where emissions are negligible, are subject to control under the EU's Integrated Pollution Prevention and Control (IPPC) Licensing regime as applied in the jurisdictions in which they operate. Detailed information on all emissions from our licensed operations are reported to the Environmental Protection Agency (EPA) or equivalent on an annual basis.

Following an aggregate electricity demand reduction of 6.5% between 2008 and 2012, total SEM demand for electricity levelled off in 2013. Natural gas prices rose in 2013 whilst coal prices reduced. As a result, generation output fell from gas fired plants, which provide the majority of SEM capacity, and generation from coal increased. GWM's balanced portfolio, with a mix of fuels including coal, gas, peat, wind and hydro, has helped ESB to weather these market trends. The theme of security of supply once again came to the fore, given the disquiet in Eastern Europe, reemphasising the importance of GWM's strategy to maintain a balanced generation portfolio.

In spite of market fuel price trends, in 2013 we reduced overall CO₂ emissions from generation by 1.5 million tonnes. Since 2006 ESB has reduced its carbon emissions from its power stations through plant retirement,

divestment and investment in new low-carbon and renewable energy generation sources. Emissions of SO_x and NO_x have also reduced year on year and against our baseline.

In line with the Greenhouse gas (GHG) protocol our Scope 1, Scope 2 and Scope 3 CO₂ Emissions for 2013 are as follows:

Scope 1 (emissions from generating stations and from the vehicle fleet)	9,316,010 tonnes from generation 12,563 tonnes from vehicle fleet
Scope 2 (comprises the electricity consumed in the premises owned or occupied by ESB)	14,051 tonnes from electricity consumed in buildings
Scope 3 (ESB employee business travel by road)	3,260 tonnes from business travel by road

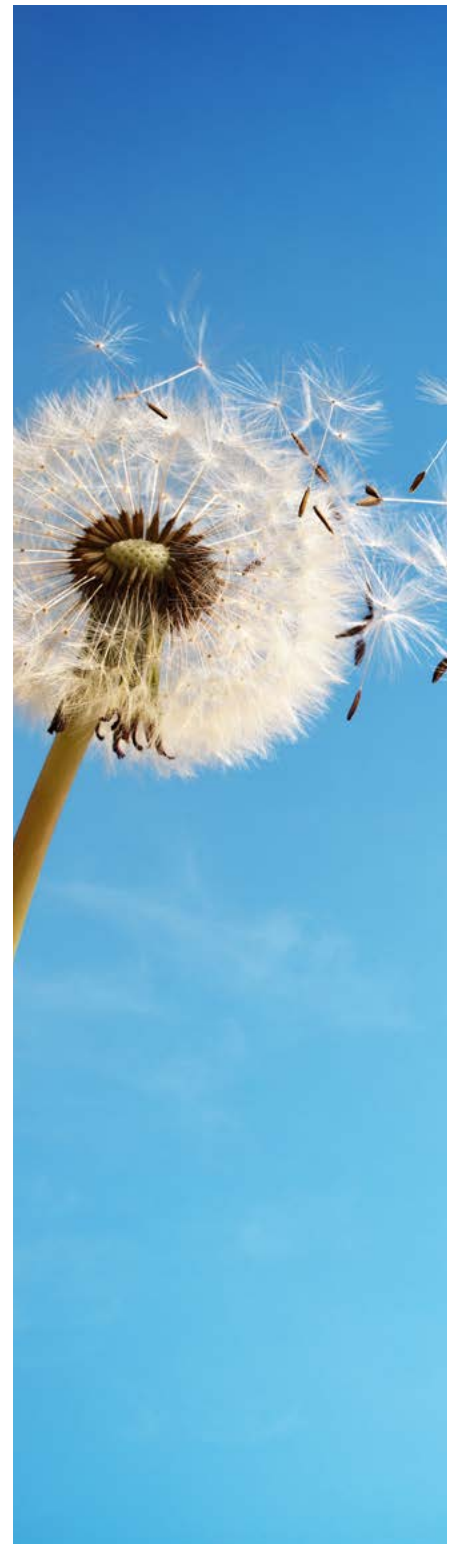
Our carbon intensity from electricity generation in 2013 was 578gCO₂/kWh, a reduction of 34gCO₂/kWh on 2012.

Sulphur Hexafluoride (SF₆) is used in most of our high-voltage switchgear on the transmission and distribution networks. It is used because of its very high electrical insulating properties and allows the switchgear to work efficiently and safely. Emissions rates for SF₆ gas are reported to the EPA on an annual basis due to its potency as a greenhouse gas. The average emission for the last five years is calculated at 0.55%, while the average for the last 3 years is 0.57%. The objective is to maintain leak rates at less than 1% per annum.

MAJOR EMISSIONS TO AIR IN ALL-ISLAND MARKET

	2006	2007	2008	2009	2010	2011	2012	2013
NO _x ktonnes	20.38	19.85	16.66	9.02	7.42	5.20	8.92*	7.81
SO _x ktonnes	25.36	23.62	18.09	10.82	6.66	7.70	8.24	8.01
Dust ktonnes	1.13	1.46	0.703	0.503	0.272	0.319	0.287	0.243
CO ₂ mtonnes	12.4	11.4	11.0	9.3	9.8	8.8	10.8	9.3

*Updated figure for 2012. Since our 2006 Baseline NO_x is down 62% and SO_x is down 68%



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- 02 SUSTAINABILITY IN ESB
- 03 HEALTH, SAFETY & WELLBEING
- 04 OUR PEOPLE
- 05 ENVIRONMENT AND CLIMATE CHANGE
- 06 SOCIAL
- 07 GOVERNANCE
- 08 ECONOMIC PERFORMANCE
- 09 APPENDICES

INTERNAL CO₂ FOOTPRINT



5.4 ENERGY USE AND INTERNAL CO₂ FOOTPRINT

In relation to energy use, the amount of energy used in our buildings constitutes the most significant portion of consumption, followed by that used in our fleet and in private cars used on company business. The bulk of energy use in buildings is attributable to space heating. Internal use accounted for 117GWh Primary Energy Equivalent (PEE) in our non-generation activities (156GWh in 2006).

This consisted of:

- 67GWh of electricity as PEE
- 1GWh of natural gas
- 49GWh of transport diesel
- 0.3GWh of renewable energy in transport.

Against our 2006 baseline, our internal CO₂ footprint has reduced by 32.9% in 2013. The estimation of CO₂ emissions from power generation stations is shown in section 5.3.

Scope 1 emissions are defined in the GHG Protocol as direct GHG emissions from sources owned or controlled by the company. In the case of ESB, the following emissions are included in this report:

- Emissions from ESB Networks Vehicle Fleet
- Emissions from Generation and Wholesale Markets Vehicle Fleet
- Direct emissions from ESB owned or occupied Buildings (heating boilers and diesel generators)

Scope 2 category as defined in the GHG Protocol deals with indirect electricity GHG emissions and covers emissions from purchased electricity consumed by the company. For this report, this comprises the electricity consumed in the premises owned or occupied by ESB.

Scope 3 is an optional reporting category which addresses all other indirect emissions. The reporting of Scope 3 emissions relates to ESB employee business travel by car. Emissions from employee air travel are excluded as emissions from aviation are included in the EU Emissions Trading Scheme (ETS).

CHANGE IN INTERNAL CO₂ FOOTPRINT

Emissions Source	Baseline CO ₂ 2006	Estimate 2010 tonnes CO ₂	Estimate 2011 tonnes CO ₂	Estimate 2012 tonnes CO ₂	Estimate 2013 tonnes CO ₂
Scope 1 Vehicle Fleet All ESB	16,788	14,147	13,856	13,312	12,563
Scope 1 Building Emissions	289	295	193	216	315
Scope 2 Indirect Emissions All ESB - Electricity usage	22,993	17,226	15,766	13,325	14,051
Scope 3 Car travel	4,951	3,912	4,000	3,370	3,260
TOTAL	45,020	35,580	33,816	30,224	30,188

A total reduction of 32.9% on our internal CO₂ footprint against a 2006 baseline



WATER



5.5 WATER

Generation activities account for the vast bulk of our utilisation of water and our aqueous discharges. A number of our generation stations have been undertaking water conservation programmes to reduce overall water usage through monitoring and changes in practice and to recycle water into the process where appropriate.

In other locations (offices and depots) across the business we have installed AMR (automated meter reader) technology in main premises, to monitor water consumption levels and help in leak detection.

In the case of ESB Networks 35 AMRs had been installed at the end of 2013. Year on year water consumption in the business has reduced from 22,094m³ in 2012 to 19,162m³ in 2013, a consumption reduction of almost 14%. A total of 9 leaks were detected and repaired in the process.



Turlough Hill Pumped Storage Station in Co Wicklow.

CASE STUDY

EXAMPLES OF WATER CONSERVATION IN THERMAL GENERATING STATIONS

Aghada

Estimated 44% reduction in water consumption in 2013 driven by rigorous monitoring, leak repairs and an increased staff focus. 13 meters are read both on and off the site on a weekly basis. Usage in 2012 was 109,587m³, reduced to 48,218 m³ in 2013.

Poolbeg

Treated water reduction project in 2013 has reduced daily treated water use of approx. 54m³/day to 22m³/day. A variety of initiatives have driven this improvement, such as carrying out a mass balance of water use for the site, valve survey, replacing passing valves, reducing water flow on the sampling system. Installation of the meter.ie water logger has been instrumental in helping to find and repair water leaks.



Aghada Station

North Wall

Daily water use has now reduced to less than 5m³/day, following investigations and leak repairs over the last few years. Installation of the meter.ie water logger has been instrumental in helping to find water leaks and reduce water consumption onsite.

Moneypoint

Water recycling projects to capture run-off, waste water and drainage systems for recycling and return to the process have recycled in excess of 5 million tonnes of water since commencement in 2010.

WASTE AND RECYCLING



5.6 WASTE AND RECYCLING

Ash from the combustion of coal and peat is the largest volume waste material produced by ESB.

ASH PRODUCTION

Station	2010	2011	2012	2013
Moneypoint	127,200	118,600	127,500	136,300
Lough Ree	32,800	50,100	48,800	38,782
West Offaly	43,100	32,700	41,400	30,786
Total Ash	203,100	201,400	217,700	205,868
FGD By product	61,500	52,400	92,200	46,700

All figures in tonnes.

Emissions abatement technology to reduce greenhouse gas emissions from Moneypoint coal-fired generating station has been installed. The abatement technology includes Flue-gas desulphurisation (FGD) equipment to reduce sulphurous oxide (SO_x) emissions and selective catalytic reduction (SCR) equipment to reduce nitrous oxide (NO_x) emissions. The FGD and SCR equipment is installed individually on each of the three generating units at Moneypoint, with the further addition of common plant

to serve all three units. A FGD waste by-product is produced through the abatement process.

In past years coal ash had been sold for use as an additive in cement, however, current demand in the market is weak resulting in a collapse of the ash resale market.

In offices and depots there has been a concerted focus on waste management, which has led to improved segregation on site, resulting in higher levels of reuse and recycling. Staff commitment and

involvement in appropriate segregation, waste reduction and improved reuse is central to our improving waste management performance. Framework contracts with key waste services providers have also increased our level of oversight and assurance of proper and legally compliant disposal methods being employed by waste contractors.

In 2013 ESB's overall recycling rate for offices, depots and generation stations totalled 93.3%.

ESB'S OVERALL RECYCLING RATE - 2013

Treatment	ESB Networks	BSC	Electric Ireland	ESB International	NIE	GWM	TOTAL
Recycled (tonnes)	9,735.1	212.0	19.0	51.7	2,254	1,685.1	13,957.2
Disposal (tonnes)	269.3	66.7	6.0	24.9	62	571.1	999.5
Total (tonnes)	10,004.4	278.7	25.0	76.6	2,315.9	2,256.2	14,956.8
Recycling rate %	97.3%	76.1%	75.9%	67.5%	97.3%	74.7%	93.3%

TRANSPORT



5.7 TRANSPORT

Given that our Networks vehicle fleet is responsible for almost 50% of ESB's internal carbon footprint, reducing transport emissions is a key element in meeting our carbon reduction target. Our Green Fleet Plan coupled with a newly installed Fleet Management System continues to drive progress in reducing transport emissions. Since 2006 we have reduced our fleet fuel consumption by over 1 million litres per annum, representing a 17% improvement over the period and equating to saving on ESB Networks fuel bill of €1.8 million per annum.

CHANGE IN FLEET FUEL CONSUMPTION

2006 (baseline)	5,759,987
2010 (diesel equiv)	5,342,074
2011 (diesel equiv)	5,158,138
2012 (diesel equiv)	4,967,966
2013 (diesel equiv)	4,776,038
% Change between 2006 & 2013 tonnes CO ₂	-17.4%

Through fleet rationalisation and enhancements, 800 vehicles have been removed from the fleet and over 50 electric vehicles (EVs) operate across the fleet, from small EVs to all electric hoists. Battery operated auxiliary equipment has replaced conventional diesel equipment and the eco-driving component of the advanced driver training programme has reduced idling time and improved driver behaviour. We continue to collaborate with the University of Limerick on biofuel trials and currently run over 100 vehicles on B20 biofuel.

The culture of utilising web based conferencing has also embedded within business practice to the extent that we continue to see reductions in private car use for business purposes, with a 28% reduction in expensed business mileage between 2006 and 2013.

5.8 ELECTRIFICATION OF TRANSPORT

The electrification of transport has the potential for many environmental benefits from zero tailpipe emissions through to helping to balance load on the network.

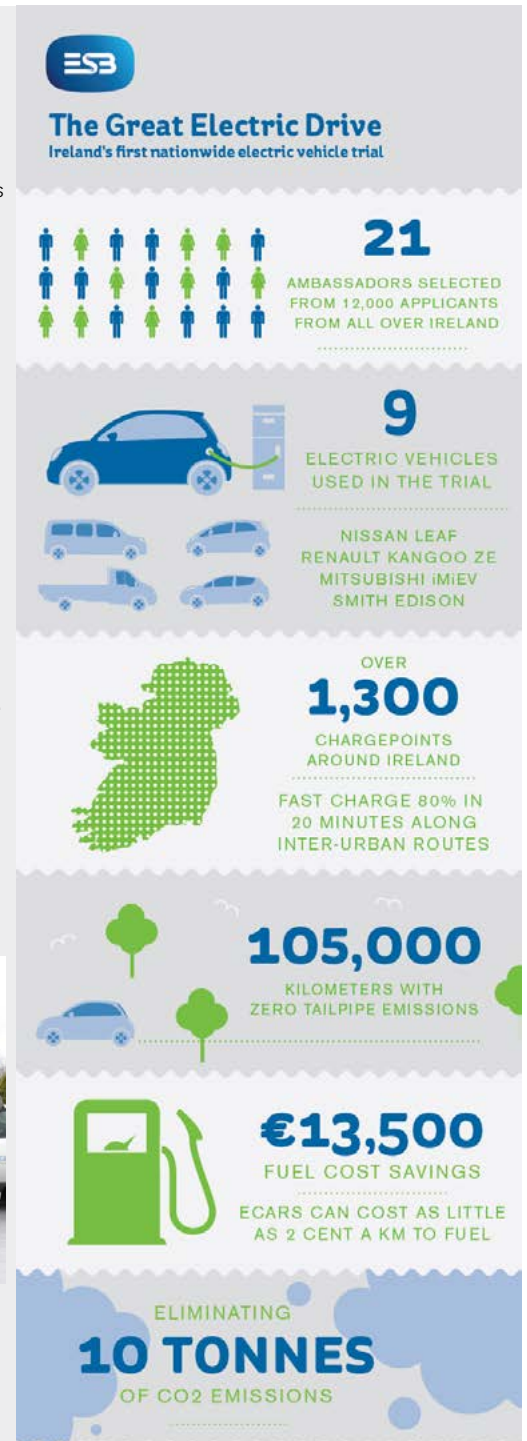
ESB has been leading the way in building the infrastructure, creating the interest and promoting the benefits of electric cars through the media, social media and initiatives such as the Great Electric Drive.

The 2013 Great Electric Drive invited participants to become ecar Ambassadors, with over 12,000 individuals and organisations expressing their interest. 9 electric vehicles were used by the 21 successful ambassadors.

Ambassadors used the electric vehicles for extended periods for their normal day to day driving and shared their experience across media and social media.



ESB ecar Ambassadors chosen to take part in the Great Electric Drive visit Ardacrusha Power Station.



ESB Business Units	Staff travel incurred 2006 km	Staff travel incurred 2013 km	% Change
TOTAL	23,858,172	17,137,057	-28.2%

BIODIVERSITY



5.9 BIODIVERSITY

The EU Birds and Habitats Directives set out various procedures and obligations in relation to nature conservation management in member states in general, and of the Natura 2000 sites and their habitats and species in particular.

The Natura 2000 network in the Republic of Ireland is made up sites, which include Special Areas of Conservation (SAC), Special Protection Areas (SPA), candidate Special Areas of Conservation (cSAC) and proposed Special Protection Areas (pSPA).

A number of initiatives have been developed to address biodiversity, including incorporating biodiversity aspects into existing environmental management systems, the adoption in 2009 of biodiversity guidelines for HV substations, biodiversity action plans, the preparation of Networks job aids addressing design work in

BIODIVERSITY TABLE

	TOTAL	INSIDE SAC	INSIDE SPA	INSIDE NHA	INSIDE PNHA
Lands under the control of ESB (km ²)	90.7	23.4	36.5	5.1	45.6
Low Voltage Stations (No.)	249,000	2504	1793	102	2312
38kV to 400kV Overhead Lines (km)	12,330	291	186	38	254
38kV to 400kV Cable (km)	1,319	16.9	20.0	0	29.0

close proximity to Natura 2000 sites and National Monuments and the preparation, with EirGrid, of draft ecology guidelines for electricity power lines.

The estimated extent of ESB assets within designated sites is set out in table above. ESB continues to assess the impact of its

operations in accordance with its obligations. In 2012 ESB undertook a comprehensive study on biodiversity issues to guide incorporation of biodiversity requirements into the Environmental Management Systems for all ESB businesses.



CASE STUDY

CONNEMARA 110KV REINFORCEMENT PROJECT - MINIMISING ENVIRONMENTAL IMPACT IN A SPECIAL AREA OF CONSERVATION

A large portion of the Connemara 110kV line passes through areas of particular environmental and ecological importance, including SACs, NHAs and a region known as the Owenriff Catchment Area which lies within the Connemara Bog Complex SAC, and is one of the few remaining catchments in Ireland with a substantial population of fresh water pearl mussels. The fresh water pearl mussel is currently listed as an endangered species and is protected under EU and Irish Law. Siltation and run off from peat into streams and rivers is the main factor contributing to the pearl mussel's rapid decline. A tributary of the Owenriff River runs immediately adjacent to the angle mast that required replacement. This was identified as a significant project risk.

Following significant geotechnical investigations which showed a critical risk

of peat slippage if any significant pressure was applied to the peat, helicopter access was chosen to transport all plant and materials to site and to assist in construction operations to reduce the risk of peat slippage and damage to the fresh water pearl mussels' habitat.

As part of the on-site inspection, an external independent consultant ecologist was employed to ensure the work minimised its footprint on the location and ensure a positive outcome for the ecology of the site.

This project has brought a new approach to working in sensitive SACs and has considerable scope to extend this sustainable construction method to other projects where environmental and access constraints pose a major construction challenge and ecological risk.

MATERIALS

5.10 MATERIALS

The materials employed in our operations of environmental concern consist of fuels for electricity generation and transport, specialist oils and Sulphur Hexafluoride (SF₆) for use in switchgear.

ESB Networks has recently undertaken two significant projects to protect against environmental damage from potential oil spills of leakage from oils in transport or storage and from 38kV transformers.

ESB Network's 38kV Transformer Retrofit Bunding Project using High Density Polyethylene based bunds are pre-fabricated and delivered as a kit for final assembly on site.

To minimise the risk of mineral oil escaping to the environment, concrete bunds are installed in new stations. Traditionally, 38kV transformers were not banded and a typical 38kV transformer holds about 5,000 litres of mineral oil for insulation and cooling purposes. There are

currently approximately 900 38kV transformers on the ESB system. The retrofit installation of a concrete bund would require the transformer to be temporarily removed, with inherent health and safety and supply continuity/plant contingency risks.

The benefits of the HDPE bund over conventional concrete retrofit are clear. The bunds are installed in about 3 days as opposed to 6 weeks for traditional concrete bunds. The bunding solution is approx. half the cost of a traditional concrete bund and all the material used to construct the bund is fully recyclable. The bunds come fitted with an oil sensitive pump coupled with a ground mounted interceptor ensuring that all rain water discharged from the bund area is to the highest environmental standards. The installation of the bunding solution has been overseen by local staff who have been impressed by the environmental and sustainable elements of the project. The bunds can also be used and adapted to bund other plant and assets across ESB.



A retrofit HDPE bund

CASE STUDY

THERE IS A BUZZ ABOUT ESB

The plight of the honey bee and its demise is receiving much media attention and prompted some interested staff into action. In 2011, staff in Poolbeg generation station, under the tutelage of Patsy Grogan (resident civil engineer and now part time bee keeper), installed two hives in a quiet corner of the station site with access to many sources of pollen and nectar. Staff on site are now benefitting from their Poolbeg honey in the station canteen. The success of this initiative in creating an interest in the role of the honey bee and their contribution to biodiversity has spread to other locations, with Leopardstown and more recently Moneypoint, getting all a buzz about their resident bees.



ESB Chief Executive, Pat O'Doherty and Patsy Grogan, Poolbeg.



Bee keeping in Poolbeg

ADAPTATION

5.11 ADAPTATION

While focusing our attention primarily on mitigation, climate change increases the risk of more frequent and extreme weather conditions which has implications for electricity systems and requires us also to consider adaptation.

The most significant threat arises in respect of our networks infrastructure and relates in

the main to the intensity of future wind and precipitation events. Our emergency response plans for storm response in ESB Networks and NIE give consideration to the increasing frequency and severity of such events and much of our network renewal efforts are to strengthen the network against such eventualities.

ESB keeps abreast of developments in relation

to adaptation, including participation in national fora on the topic and undertakes some specific projects in relation to adaptation such as flood hazard mapping and other studies to assist in the national planning and development processes and emergency response planning.

CASE STUDY

ESB NETWORK'S OIL STORAGE, HANDLING AND TRANSPORTATION IMPROVEMENT PROJECT

ESB Network's ISO 14001 externally accredited Environmental Management System's internal audit process highlighted the need to identify and implement necessary improvement measures with oil, waste oil, and diesel storage, handling and transportation, so as to minimise any associated environmental and health and safety risks.

The project was broken down into three phases:

Phase 1: Carry out an environmental risk assessment on all identified oil/diesel storage facilities, and review mineral oil transportation methods.

Phase 2: Prioritise upgrade requirements based on this risk assessment.

Phase 3: Carryout oil/diesel storage, handling, and transportation improvements.

Activities included:

- Upgrading of oil and diesel storage facilities at depots, fleet & equipment garages, HV stations and on the off shore islands
- Purchase of mobile bundled bowsers for the transportation of mineral oil to and from HV/MV stations



- Provision of spill kits and associated consumables
- Staff training on oil spill response.

Over the last two years alone, upgrade works have been completed at 19 locations nationwide, a major refurbishment of the diesel storage facility for generators on Inishturk Island was also completed and 13 Mobile Bunded Bowsers purchased for the safe and compliant transportation of mineral insulating oil to and from ESB Network's HV Stations during 2013. In addition, to date approximately 400 staff have been trained in Liquid Spill Response.



Top: Typical Oil Storage Facility after improvements
Above: Mobile Bunded Bowser

COMPLIANCE

5.12 COMPLIANCE

ESB is committed to meeting the stretching targets and regulations established for our industry.

Under the Integrated Pollution Prevention and Control Licences (IPPC) and Greenhouse Gas Permits issued and monitored by the Environmental Protection Agency (EPA), each licence and permit is audited by the EPA (or equivalent) on at least an annual basis to individually assess station compliance with all licence conditions. ESB Hydro stations, which do not come under the remit of the IPPCL regime, generally are subject to control under Water Pollution legislation and specifically to

the conditions contained in relevant water discharge licences. These water discharge licences are issued and monitored by the relevant Local Authority.

During 2013, no material breaches of licences were noted by the regulatory authorities. In addition we currently submit reporting on a number of energy efficiency, carbon reduction and energy consumption based requirements, such as:

- Public Sector Reporting requirements – target to reduce energy consumption (non generation) by 33% by 2020, submissions made to SEAI under SI542 of 2009

- Energy Supplier Better Energy targets 2011-2013 – ESB makes an annual submission on energy efficiency achievements to SEAI. In the period 2011-2013, a total of 220GWh of energy efficiency reductions were submitted to SEAI.

A cross-business unit working group, Environmental Management Group, monitors developments related to environmental management systems, issues relating to adherence to new legislation and assuring legal compliance.

CASE STUDY

MATERIALS MANAGEMENT ON WOODHOUSE WIND FARM, CO WATERFORD

The materials management process on wind farm construction projects illustrates the level of forethought that goes into protecting the environment both from a transportation requirement and use of indigenous materials.

This process is being implemented effectively on the 8 turbine wind farm currently under construction in Woodhouse Co. Waterford:

- Over 60,000m³ of material was excavated from the 8 turbine base locations and from a large excavation on site for a 110kV substation. 20,000m³ of this was reused as subgrade material for the build up of crane hardstands and access tracks. 40,000m³ of extracted quality rock material was stored in a designated area on site for crushing works
- A 45 tonne crawler excavator loads the hopper of a crushing machine which then crushes the material to a classification suitable for sub-base build up for access tracks and crane hardstands. Further crushing is required to produce a material



Materials management at Woodhouse wind farm construction site in Co. Waterford.

- suitable for the capping of access tracks and crane hardstands
- This system of utilising site won material can potentially reduce the road construction costs on a project by up to 30%. In addition to the financial benefits there is also a reduced impact on the local road network by substantially reducing deliveries to site.



06 SOCIAL

ENERGY FOR GENERATIONS FUND

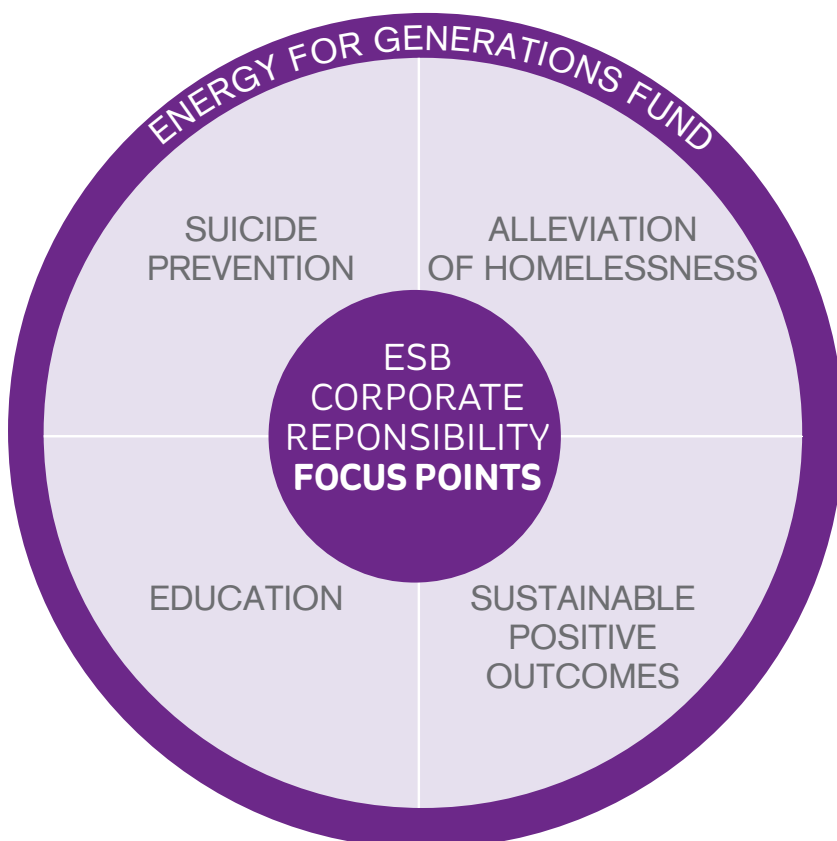
6.1 OVERVIEW

ESB is committed to being a responsible corporate citizen and a good neighbour. Our company investments, community partnerships and support for employee volunteering help to improve the quality of life in the communities we serve.

We sponsor and donate to programmes directly related to the company’s business objectives. We also recognise that this is a very effective way of engaging with our staff on issues that are of real concern and present significant challenges to our society. Our Energy for Generations Fund works in partnership with service providers and specialists to support effective intervention initiatives and programmes.

As a leading Irish organisation with deep roots in the community dating back to 1927, we are committed to playing a role in addressing some of the key social issues facing Ireland today.

Summary Impacts and Opportunities for Corporate Responsibility and Community Engagement		
Topic	Progress to 2013	Future Objective
Corporate Responsibility Fund	ESB Energy for Generations Fund established.	Continue to focus on areas of education, homelessness, suicide prevention and staff volunteering
Sustainable Procurement	Supplier Charter and 3rd Party Contractor Requirements published emphasising focus on sustainability during procurement.	Continue to develop sustainable procurement roadmap with procurement workshops in 2014.
Community Engagement	Extensive programmes in place at local and community levels.	Continue to develop community engagement initiatives in all business units.
Sponsorship	Electric Ireland sponsorship of GAA Minor Championships	Continue to be involved in national sponsorships to engage with our communities



We take pride in being engaged with local communities across the country and providing the support and sponsorship directly and through the activities of our staff.

6.2 ENERGY FOR GENERATIONS FUND

In November 2013, we launched our new Energy for Generations Fund, making a commitment to corporate responsibility investment which will see over €2m per year disbursed across a range of community and issues-based initiatives. This new Fund builds on the work we have been engaged in since 2005, with our previous Electric Aid Ireland Fund.

Our aim with the Energy for Generations fund is to maximise the impact of our investment by taking a more strategic approach to effect change. Approximately €1m per year will be dedicated to addressing issues relating to education, homelessness and suicide prevention. ESB has been supporting initiatives in the areas of suicide prevention and homelessness since 2005, and has invested over €7 million with voluntary organisations and charities providing support in these areas over the past 8 years.

BUSINESS WORKING RESPONSIBLY MARK

6.3 BUSINESS WORKING RESPONSIBLY MARK

In October 2013, ESB was awarded re-certification to the Business In The Community Business Working Responsibly (BWR) Mark. ESB was one of four companies to be re-certified to the BWR Mark.

This is Ireland's only independently verified rating of sustainability and corporate responsibility performance. We were pleased we improved our performance from 2011 against each area of measurement (environment, community, workplace, marketplace and communications and leadership). The Mark continues to be a tool that enables companies to measure themselves against their peers and against ever-more demanding targets.

As founder members of BITC we are pleased that the Mark is becoming recognised as a valuable national standard.



President Michael D Higgins speaking at An Cosán

6.4 PARTNERSHIPS IN EDUCATION

The Energy for Generations fund introduces a new focus on education, which recognises the need for educational supports at all levels to ensure that Ireland has the skills it needs to compete effectively in the future.

In December 2013 we announced two significant new educational partnerships.

With An Cosán, the adult and community education centre in West Tallaght, Dublin we are supporting their development of Ireland's first virtual community university – a very interesting and innovative initiative, building on their 25 years of work in the adult education sector.

With Business in the Community we have become the national partners of the "Time to Read" literacy initiative, which matches primary schools with local companies who support staff in providing one-to-one reading time with 7 – 8 year olds for one hour per week.

In adopting education as a strategic priority for funding, we are conscious of both our own need to ensure that our workforce of the future has had the benefit of access to high quality education and of the benefits that we, as a company, have realised through the strong skill sets of our own staff.

The remainder of the €2 million fund will be allocated across a range of initiatives including wind farm community funds, fuel poverty programmes, support for a significant new staff volunteering initiative and the continuing provision of matching funding for our staff social justice fund Electric Aid, working in support of development issues for over 25 years.



Pictured (l-r) are Richard Bruton TD, Minister for Jobs, Enterprise and Innovation, Pat O'Doherty, ESB Chief Executive and Kieran McGowan, Chairperson, BITC Ireland.



Pat O'Doherty, Chief Executive, pictured with children from St. Patrick's GNS Ringsend, at the launch of the Time to Read Programme 2013.

VOLUNTEERING

01 EXECUTIVE SUMMARY

02 SUSTAINABILITY IN ESB

03 HEALTH, SAFETY & WELLBEING

04 OUR PEOPLE

05 ENVIRONMENT AND CLIMATE CHANGE

06 SOCIAL

07 GOVERNANCE

08 ECONOMIC PERFORMANCE

09 APPENDICES

CASE STUDY

NIE EDUCATIONAL OUTREACH ON STEM

NIE is committed to promoting and increasing awareness of STEM (Science, Technology, Engineering and Maths) related subjects. As our society continually advances we are becoming ever more reliant on the skills and expertise of STEM related subjects, increasing the demand for people with these skills on a national and international level. The Royal Academy of Engineering estimates that around 820,000 Science, Engineering and Technological professionals will be needed by 2020.

However despite this growth in demand there are fewer young people studying these subjects at school and ultimately pursuing a career in the area of STEM. This is particularly evident with women, who are outnumbered by men by nearly 3 to 1 in high level STEM posts in the Northern Ireland economy.

NIE believes that by educating young people through our outreach initiatives about the potentials, positives and endless possibilities of studying STEM related subjects, we can help increase the numbers taking up these subjects.

As part of its outreach programme NIE currently attends approximately 50 careers



L to R: Evelyn Collins, Chief Executive Equality Commission; Gordon Parkes, NIE; Derek Baker, Permanent Secretary Department for Employment & Learning; Dr Joanne Stewart, STEM Business Group

fairs and events per year in addition to its normal outreach activity, such as First Lego League, Sentinus Research and Development Programme, IET SMART Energy Project, NIE STEM career and activity days, NIE Industrial bursaries and working with Queen's University Belfast to increase the current uptake of places

for Electrical and Electronic Engineering.

The NIE Scholarship Programme in conjunction with Queen's University Belfast. The scholarships include financial support, mentoring and invaluable experience within the power industry.

6.5 VOLUNTEERING

Funding is only part of the jigsaw – we also want to leverage the skills and knowledge we have within the company to bring about more sustainable and positive outcomes. The Energy for Generations Fund provides support to staff who volunteer within their own communities. Staff who volunteer at least 20 hours of their own time

per year will be invited to apply for funding of up to €250 for their chosen registered charity.

A huge number of our staff are involved in volunteering activities in their spare time, but we have never had a formal structure to support or encourage this in the past. Through this funding, our aim is to demonstrate our support for the

work our staff do within their own communities.

This re-organisation will build on these achievements and strengthen our capacity to create effective partnerships that really deliver for our target communities, using both our own resources and supporting our staff in committing their own time and energy.

ELECTRICAID



Smiling faces in Ethiopia

6.6 ELECTRICAID

ElectricAid is the social justice and development charity of ESB (and EirGrid plc) staff and pensioners. There is a membership of 2,450 contributors, strongly supported by ESB and Eirgrid. Income in 2013 of €1.309 million, including €103,000 for its Special Appeal for Syria and the Philippines, which represents a small increase on 2012.

This income allowed ElectricAid to fund a total of 149 development and relief projects with €1.313 million. The superb and effective work which is made possible through the generosity of our members and supporters changes, enriches, develops and saves lives. We estimate that ElectricAid has touched and transformed the lives of at least 1.5 million people in Ireland and the Developing World since 1987.

We fund in accordance with our priority area, with a strong emphasis on agricultural development, income generation, basic and vocational education, water, sanitation and other basic infrastructure. These accounted for 58% of our fundings. Despite the high profile of emergency relief funding, this category only accounted for

11% of our activity. This demonstrates once again, that we are primarily engaged with development.

TRANSPARENCY IN FUNDRAISING

ElectricAid is at all times conscious of its responsibilities in disbursing significant amounts of money donated by members, supporters, and the companies.

The 2013 revelations of unacceptable practices around salary and payments in a small number of Irish medical charities have damaged the entire voluntary and NGO sector.

We give sustained attention to governance issues and to our commitment to an agenda of real openness and transparency.

We do not contribute to the salaries and overhead costs of applicant organisations. ElectricAid publishes its audited annual accounts in its Annual Report and has signed up to the voluntary Code of Governance for Charities, and are members of Dóchas, an umbrella body with a strong remit for governance.



Brahane in Ethiopia showing improved potato production - project funded for Vita by ElectricAid

ELECTRIC AID FUNDINGS BY CATEGORY 2013



- AGRICULTURE & INCOME GENERATION 37%
- EDUCATION & TRAINING 25%
- WATSAN & INFRASTRUCTURE 25%
- EMERGENCY RESPONSES 17%
- HEALTHCARE 12%
- DISABILITIES 12%
- ENERGY 11%
- OTHER PROJECTS 10%

STAFF-LED INITIATIVES

6.7 STAFF LED INITIATIVES

The generosity of ESB Group staff in the time, skills, energy and fundraising they commit to so many worthy causes are truly noteworthy. Here are just a few examples of the many staff led initiatives that have benefitted local communities and charity organisations during 2013.



During September the Central Procurement team in G&WM Head Office turned their hand to helping the Dublin Simon Community as part of a team development day



Staff from the Customer Contact Centre Wilton took part in the be bald be bold campaign for Cancer support



ESB team completes Virgin London Active Triathlon and raise almost €3,000 for Concern



NIE staff involved in the Action Cancer Cares Shop Challenge which raised over £6,000 for the charity



Krystle Healy of the ESB Trading Charity Committee posing with the six brave Shave or Dye volunteers. L-r: Adrian Kelly, Kilian Morgan, Dave McMorow, Donncha Herlihy, Eric Slattery and Eugene McAuley



Four Peakers raise €21,470 for Focus Ireland

ESB IN THE COMMUNITY

6.8 BUSINESS IN THE COMMUNITY

ESB and NIE are members of their respective branches of Business In the Community. We work closely with BITC and other network members to promote responsible business.

ESB SUPPORT BITC COORDINATED MENTORING PROGRAMME

ESB staff have been working as mentors with a group of students from Rosmini Community College in Drumcondra, Dublin. The mentoring programme is coordinated by BITCI. It is designed to support students in 5th and 6th years, with the objective of keeping them in school to complete their leaving certificates and supporting them in making college and career decisions.



Frances Fitzgerald, TD, Minister for Children and Youth Affairs pictured with ESB mentors and students from Rosmini Community College following successful completion of the 2 year mentoring programme

PARTNERSHIP WITH BUSINESS IN THE COMMUNITY

More than 200 days of NIE time are dedicated each year to community initiatives to promote safety around electricity, skills and careers advice and guidance. In 2013 NIE set a specific target to give an additional 2,000 expert volunteer hours to charity (1,000 hours of NIE time and 1,000 hours of employees' personal time) by nominating around 30 employees for appointment to the boards of local voluntary, community and social enterprise organisations through Business in the Community's 'Business on Board' project. The various boards are benefiting from the skills and expertise of NIE employees with the participants gaining from the development of new skills, especially on financial and strategic issues which can help their development within NIE.



Representatives from ESB & Gaeltech Energy with staff and pupils, taken in the new facility at St. Mary's National School, Drung, where they received a grant to resurface a play area pitch in the school grounds through the Mountain Lodge Wind Farm Community Fund

COMMUNITY IMPACT

ESB Group also collaborates with BITCI and BITC NI in ensuring that our Community Impact is tracked via the Business In the Community Impact Map. The map shows the many locations in which ESB Group assists by providing funding in many worthwhile organisations through the island of Ireland.

WIND FARM COMMUNITY FUNDS

Community engagement around ESB wind farms is governed by ESB's wind farm community engagement policy. During 2013 the Wind farm community fund was particularly active with Mountain Lodge wind farm, Co Cavan, Ireland and Myndd y Betws wind farm, Carmarthenshire, Wales, communities.

ESB and Gaeltech Energy (co-owners of the wind farm) hosted an awards night for the second

instalment of the Mountain Lodge Wind farm Community fund. 10 community groups received grants on the night. The fund is designed to support projects and communities located near the wind farm.

At Betws Wind Farm, the Community Fund supported a number of local community groups during 2013, including Organised Kaos, Swansea Valley History Society, Llangiwig Community Association, Pontardawe Town Council, The Script Writers.

SPONSORSHIPS

GAA

Electric Ireland sponsors the GAA Football/Hurling All-Ireland Minor Championships. It aims to promote the Minor Championships, increase awareness and attendance at matches and support the GAA stars of the future. We provide a bursary of €10,000 for the winning county in both hurling and football to further develop the minor games in their respective counties.

POWERING KINDNESS

Electric Ireland's Powering Kindness Week is an initiative which encourages people to do a simple act of kindness and bank it in favour of one of three Irish charities, to help them share in Electric Ireland's €130,000 fund. This was the second year during which over 45,000 good deeds were banked through poweringkindness.ie, Facebook, Twitter, Instagram and by text messages. Running from 2nd–8th November 2013, the campaign really captured the imagination of people around Ireland. Childline won the top prize of €60,000 for having the most deeds banked in their name, with Special Olympics Ireland and Breakthrough Cancer Research receiving €40,000 and €30,000, respectively.



Organised Kaos Circus Skills Mini bus sponsored by ESB via the Community Fund at Betws wind farm in Wales



NIE apprentice Gordon Lennox prepares for the opening of Lumiere in Derry, City of Culture 2013.

6.9 SPONSORSHIPS

LUMIERE DERRY/LONDONDERRY UK CITY OF CULTURE 2013

NIE was the main sponsor of the 'Lumiere' art and light show, one of the key events in Derry/Londonderry's year as UK City of Culture. Lumiere transformed familiar city landmarks, buildings, hidden spaces, parks and waterways into a magical nocturnal landscape of artworks made from light that sets out to amaze, delight, and stop people in their tracks.

PIETA HOUSE DARKNESS INTO LIGHT

Darkness into Light is a fundraising walk in aid of Pieta House, the suicide and self-harm crisis centre. The walk, now in its fifth year, took place in 20 locations nationwide on Saturday May 11th.

Darkness into Light was proudly supported for 2013 by Electric Ireland. Electric Ireland understands the importance of bringing light into people's homes and communities.

This unique event, which begins at 4.00 a.m. as thousands of people gather in the darkness across Ireland and walk or run the 5 km route as dawn is breaking, is the most vital component of the Pieta House fundraising calendar.

Electric Ireland also supported the event with bill inserts, which reached 1.3 million homes and a radio and outdoor campaign, to raise awareness and encourage involvement in the 2013 event.

In 2012, 14,000 people participated in the event at 14 locations nationwide. In 2013 a record 40,000 people took part in the 20 locations nationwide.



Participants in the Phoenix Park, Dublin.



ESB staff member Jessie Buckley and her daughter Lauren.

6.10 HUMAN RIGHTS PROTECTION

ESB expects all suppliers/contractors providing goods, services or works to ESB and/or on behalf of ESB to conduct their business in an honest and ethical manner, in accordance with all applicable laws and to respect internationally recognised human rights. These requirements are described in our Supplier Charter and Supplier Requirement Policies which were updated in 2013 and outline our requirements in areas such as human rights, business ethics, anti-corruption and employment standards.

We promote respect for human rights to staff through our Charter on Dignity in the Workplace.



07 GOVERNANCE

7.1 OVERVIEW

Good governance is essential to the sustainable growth of our business. The ESB Board is committed to the highest standards of corporate governance, and transparency and accountability are at the heart of this commitment.

7.2 ESB BOARD

The ESB Board is responsible for the long-term success of ESB and decisions are only made after the necessary level of information has been

made available to Board members and with due consideration of the risks identified through the risk management process.

Six committees of the Board assist in the execution of its responsibilities and the Board delegates specific responsibilities to these Board committees as set out in their terms of reference. The committees assist the Board by giving more detailed consideration to business, operational and governance issues and they report to the Board

with any necessary recommendations.

- These committees are:
- Audit and Risk Committee
 - Health, Safety and Environment Committee
 - Market and Customer Committee
 - Regulation Committee
 - Remuneration and Management Development Committee
 - Finance and Business Performance Committee

Summary Impacts and Opportunities in Governance		
Topic	Progress to 2013	Future Objective
Code of Practice	Full compliance with the Code of Practice for the Governance of State Bodies to ensure: <ul style="list-style-type: none"> - compliance with statutory obligations - against conflicts of interest - adequacy of financial controls - appropriate Board composition and to ensure a balanced, true and transparent Board activity	Continue to review and updates policies and procedures to ensure compliance with the Code
Risk Management	Comprehensive Enterprise Risk Management Framework in place	Continue to evaluate changes in the risk profile
Ethics	ESB Code of Ethics in place which outlines our approach to responsible business behaviour	Continue to ensure the highest standards of integrity, loyalty, fairness and confidentiality in all business dealings

FOR FULL DETAILS ON THE MEMBERSHIP OF THE BOARD AND THE BOARD MEMBERS REPORT FOR 2013, PLEASE FOLLOW THE LINK TO THE RELEVANT SECTION OF THE ANNUAL REPORT [CLICK HERE](#)



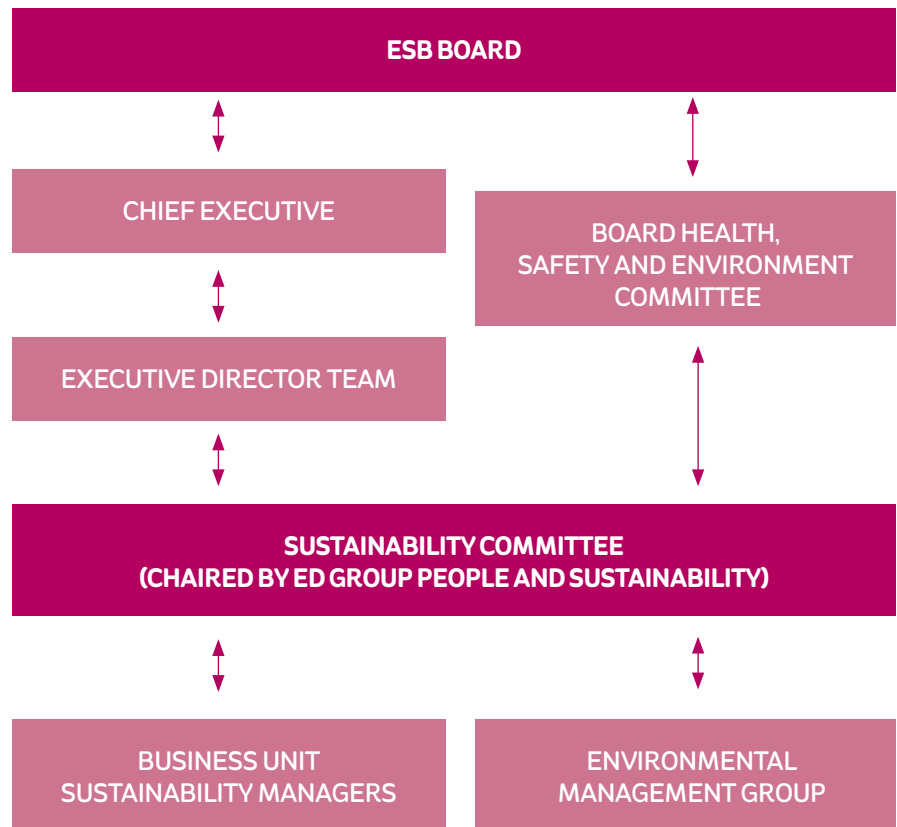
Chief Executive Pat O'Doherty and Board Members pictured during a visit to Carrington construction site.

GOVERNANCE OF SUSTAINABILITY

7.3 GOVERNANCE OF SUSTAINABILITY

The Board Committee on Health Safety and Environment oversee and provide governance on the implementation of the sustainability strategy and facilitate detailed consideration of sustainability matters on behalf of the Board. A Sustainability Committee is chaired by the Executive Director Group People and Sustainability and made up of senior managers from each business unit. The Sustainability Committee is responsible for approval of the sustainability strategy and for providing leadership on sustainability in each business unit. The committee meets four times a year to review progress and overall group performance against the strategy. The committee also oversees assurance on environmental management through receiving reports from an Environmental Management Group, made up of business unit Environmental Co-ordinators which meets four times a year. Sustainability Managers in each business unit are responsible for driving and championing sustainability in each business unit supported by line managers and staff and a network of volunteer Sustainability Champions.

The key issues that were discussed by the Sustainability Committee in 2013 were the implementation and approval of the new strategy following the success of the Sustainability Programme in period 2008 to 2012 and the challenges associated with embedding sustainability in each business unit at a time of significant change within ESB.



THE WAY WE WORK

THE WAY WE ARE STRUCTURED

Our organisation is structured to allow for effective and efficient decision-making with clear accountabilities.

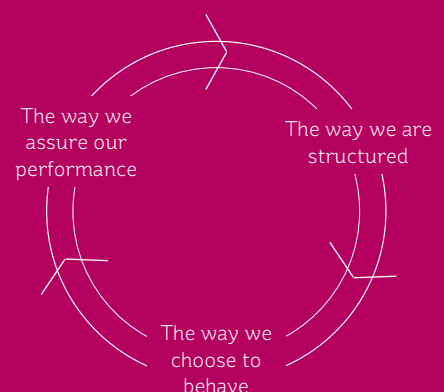
THE WAY WE CHOOSE TO BEHAVE

- We comply with the Code of Practice for the Governance of State Bodies (updated in 2009).
- We conform as far as possible and on a voluntary basis, to the UK Corporate Governance Code.
- Our code of ethics outlines our approach to responsible business behaviour. The

underlying principle of the code is that employees will strive to perform their duties in accordance with the highest standards of integrity, loyalty, fairness and confidentiality and that they will abide by all legal and regulatory requirements to enhance the reputation of the ESB Group.

THE WAY WE ASSURE OUR PERFORMANCE

- Management assurance is provided by a combination of effective management processes and risk and compliance activities.
- Independent assurance is provided primarily by internal audit and by our external auditors.



SUSTAINABILITY RISKS AND CHALLENGES

7.4. SUSTAINABILITY RISKS AND CHALLENGES

The following sustainability risks are highlighted as key risks in the sustainability area that have a potential material impact on our overall business operations. As such they are risks that are managed through our Enterprise Risk Management Framework.

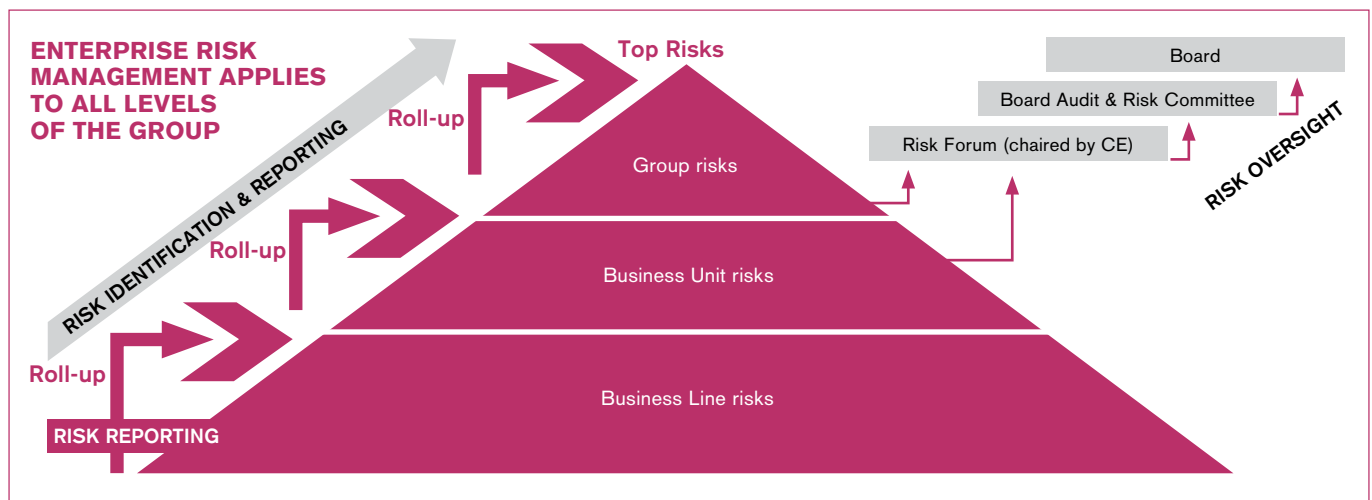
Risk / Challenge	Mitigation
HEALTH & SAFETY	
ESB is subject to stringent health and safety legislation covering all aspects of its activities. Maintaining compliance with health and safety legislation and creating a zero harm environment is a significant challenge given the high risk activities inherent in an electrical utility business.	ESB rigorously enforces its safety policies and standards to achieve its ultimate target of creating a zero harm environment. An extensive safety management programme, fully supported by the Board and Management, is in place throughout ESB to address key safety risks and issues and is subject to review on an on-going basis.
ENVIRONMENT & CLIMATE CHANGE	
ESB is subject to stringent environmental legislation with increasing focus on climate change and environmental issues. ESB strategy is to de-carbonise its generation activities by 2050 in line with other European utilities. There are significant challenges associated with delivery of this strategy including the costs and financing of new renewable technologies, the cost of carbon and operation of the EU Emissions Trading Scheme, energy trading arrangements, government and EU policies and the development of EU Regional Energy Markets.	ESB ambition is to develop a low-carbon generation business of scale. This balanced portfolio includes non-renewable generation (coal, gas and peat) and an increasing amount of renewable energy (hydro, wind and other renewable energy technologies). ESB has put in place the necessary skills, competencies and expertise to deliver this ambition including the assessment of new emerging technologies which will be part of the energy mix in future years as well as management of existing environmental risks.
SUSTAINABLE INNOVATION	
ESB is heavily involved in assessing new emerging innovative technologies. There are inherent risks and challenges associated with developing new technologies and new business models which have the potential to disrupt the existing energy market.	ESB has established a dedicated business area to focus on the development of sustainable business opportunities in specific areas of Innovation including Electric Vehicles, Broadband, Ocean Energy, Solar PV and clean-tech investments. The team are involved in both assessing the technologies and also the required business models to assist with our overall sustainability ambitions.
WORLD CLASS NETWORKS	
Our vision is to deliver a World Class Electricity Network for the Irish nation. ESB is heavily involved in developing the electricity network to accommodate increasing amounts of renewable energy with a strong focus on Smart grids and Smart metering. There are inherent challenges in developing the network to accommodate 40% renewable energy by 2020.	Over the last 10 years we have invested €1 billion to refurbish and upgrade the national electricity network. We have facilitated over 1,800MW of wind generation, enough to power almost 1 million homes. Through building a Smart Network we have increased network reliability – power cuts have reduced by 42%. We have rebuilt over 90,000km of network, while also doubling the capacity of over 50,000km.
CORPORATE RESPONSIBILITY	
ESB is involved in all aspects of Irish life and is very involved in the community. ESB places a strong emphasis on its reputation as a strong leading player in the industry and any adverse publicity could cause harm to that reputation.	ESB works hard at all levels to being a responsible company. We are pleased to have been awarded the Business Working Responsibly Mark since 2011 as external validation of our commitment to being a responsible company. We will continue to engage with our stakeholders and the wider community and to ensuring all activities are carried out in a responsible manner.
PEOPLE	
ESB's ambition is to build an engaged and agile organisation. While ESB has in place best practice HR policies and procedures, there remains a challenge to ensure that ESB has access to the future skills and competencies required for the new emerging energy sector post 2020.	Strategic Resource Planning is carried out on an annual basis within each business line. It involves analysing business issues, needs and drivers to develop plausible scenarios on which workforce planning is based. The resultant workforce demand is developed and compared to the supply and a strategy emerges to address the gaps.
GOVERNANCE	
ESB is subject to appropriate governance legislation covering all aspects of its activities. Inadequate compliance with our governance framework would introduce a risk to the business.	ESB has put in place the appropriate measures to comply with the Code of Practice for the Governance of State Bodies, updated in 2009. ESB also conforms as far as possible, and on a voluntary basis, to the UK Corporate Governance Code. ESB continuously reviews its policies and procedures to ensure best practice in corporate governance.

ENTERPRISE RISK MANAGEMENT

7.5. ENTERPRISE RISK MANAGEMENT FRAMEWORK

The Risk Management Framework sets out the risk strategy and risk appetite for the Group and establishes clear policies, processes and procedures to ensure a consistent approach to risk identification, evaluation and management across the Group.

FULL DETAILS OF OUR ENTERPRISE RISK MANAGEMENT PROCESS INCLUDING A RISK MATRIX ARE AVAILABLE IN THE ANNUAL REPORT 2013, [HERE](#)



CHANGES TO GROUP RISK PROFILE

Risks	2013	2012	Change	Description of Risk Change
A. Regulatory Risk	High	High	↑	Uncertainty related to market reforms in SEM and GB and downward pressure on regulated returns for networks businesses.
B. Change Programmes IR Risk	High	Medium	↑	A more difficult IR environment emerged during 2013 related to pension and impact of change programmes.
C. Trading/Operational risk	High	High	↔	Complex trading environment, new trading systems and new financial regulations contributed to elevated trading risks for the business in 2013.
D. Investment/ Project Execution Risk	Medium	N/A	↔	Risk associated with successful delivery of major new construction project and maintenance programmes for key assets required specific risk management attention.
E. Competitive and Economic Pressures	High	High	↔	New entrants, increased interconnection and low growth in electricity demand intensified competitive pressures.
F. Risk to Reputation and Public standing	High	N/A	↑	Public perception of utilities in general and concern about electricity prices contributed to brand risk.
G. Funding Risk	Medium	High	↓	Much improved market conditions and return to more normal funding conditions reduced this risk considerably.
H. Health & Safety Incident	High	High	↔	While the risk of a safety incident remains constant, review and implementation of new safety policies and procedures were designed to reduce this risk.
I. Failure of Infrastructure (IT, Plant, Technology)	Medium	N/A	↔	Increased dependency on IT systems and telecommunications to support business processes.



08
ECONOMIC
PERFORMANCE

8.1 FINANCIAL PERFORMANCE 2013

This year has seen solid financial performance across our business with revenue and operating profit at €3.5 billion and €780 million respectively.

OPERATING PROFIT*

€780m

2013	€780m	€365m
2012	€415m	2011 €469m
2010	€9m	2009 €615m

* Stated after exceptional items. Finance Review in the 2013 Annual Report [Please Click Here](#)

EBITDA

€1,437m

2013	€1,437m	€342m
2012	€1,095m	2011 €1,121m
2010	€839m	2009 €814m

TOTAL ASSETS

€12,782m

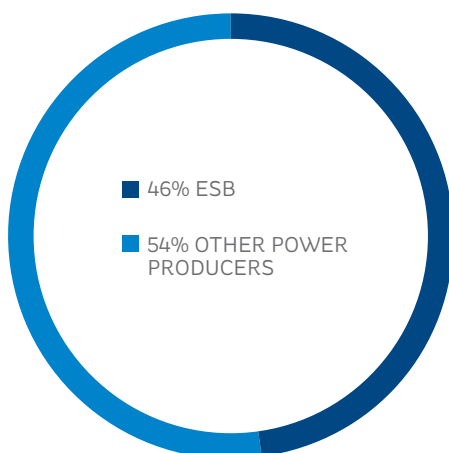
2013	€12,782m	€182m
2012	€12,600m	2011 €12,539m
2010	€12,112m	2009 €9,567m

NET DEBT

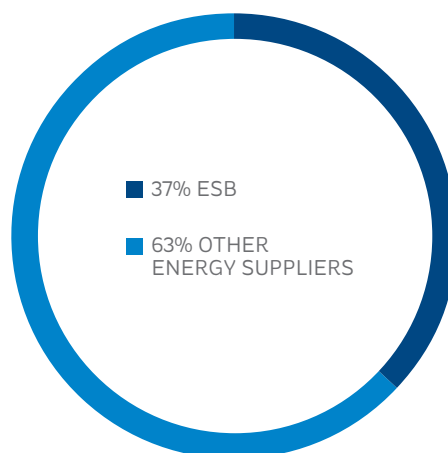
€4,144m

2013	€4,144m	(€270m)
2012	€4,414m	2011 €4,324m
2010	€3,944m	2009 €2,231m

GENERATION
all-island market share

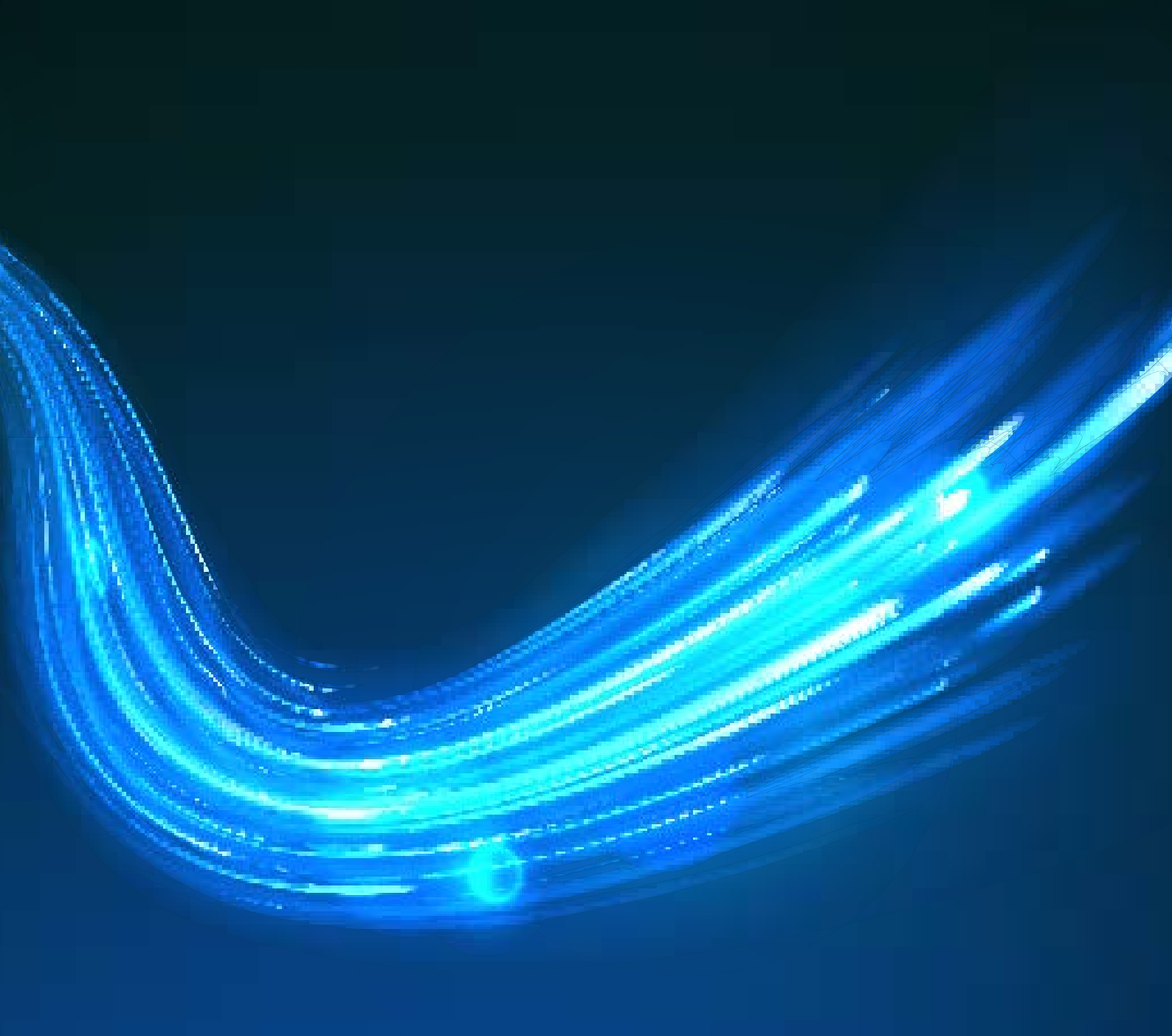


SUPPLY
all-island market share



FINANCE REVIEW IN THE 2013 ANNUAL REPORT [HERE](#)

FOR OUR FULL FINANCIAL STATEMENTS FOR 2013, PLEASE REFER TO SECTION 5 2013 ANNUAL REPORT [HERE](#)



09 APPENDICES

9.1 INDEPENDENT ASSURANCE STATEMENT



GRI Application Level Check

DNV GL was engaged by the Electricity Supply Board (hereafter “ESB”) to carry out an independent review of the GRI Application Level for ESB’s 2013 Sustainability Report (hereafter ‘the report’).

Following a review of ESB’s 2013 Sustainability Report against the GRI G3.1 requirements, DNV GL confirms that the report has achieved an application level of C+.

GRI Application Levels communicate the extent to which a sustainability report has been developed in accordance with the GRI guidelines. DNV GL’s independent review confirms that the required set and number of disclosures for Application Level C have been addressed in ESB’s reporting. The GRI Table of Disclosures within the report’s appendix demonstrates a valid representation of the disclosures, in accordance with the GRI G3.1 requirements.

This statement does not provide an opinion on ESB’s sustainability performance in 2013 nor on the quality of information in the report. DNV GL has not been engaged by ESB on any other commitments in 2013 which could compromise the independence of our statement.

DNV GL has also provided ESB with a set of recommendations for improvements to future reporting, for internal use.

Prepared by Technical Review:

Technical Review:

Priti Nigam
 Senior Consultant
 DNV Business Assurance

Tracy Oates
 Principal Consultant
 DNV GL

SECTION 9.2 GRI 3.1 CROSS REFERENCING TABLE OF DISCLOSURES

1. Strategy and Analysis			
GRI 3.1 Disclosure	Description	Location of Disclosure	Level of Disclosure
1.1	Statement from the most senior decision-maker of the organisation.	Section 1.1	Fully
1.2	Description of key impacts, risks, and opportunities.	Section 1, Section 7.4	Partially
1. Organisational Profile			
2.1	Name of the organisation.	Section 2.1	Fully
2.2	Primary brands, products, and/or services.	Section 2.1, Section 2.4	Fully
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Section 2	Fully
2.4	Location of organisation's headquarters.	Rear Cover	Fully
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Section 2.4	Partially
2.6	Nature of ownership and legal form.	Section 2.1	Fully
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Section 2.1	Partially
2.8	Scale of the reporting organisation.	Section 1, Section 4, Section 8	Fully
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Section 1.1	Fully
2.10	Awards received in the reporting period.	Section 2, Section 6	Fully
EU1	Installed capacity, broken down by primary energy source and by regulatory regime.	Section 2.4	Partially
EU2	Net energy output broken down by primary energy source and by regulatory regime.	Section 2.4	Partially
EU3	Number of residential, industrial, institutional and commercial customer accounts.		Not
EU4	Length of above and underground transmission and distribution lines by regulatory regime	Section 2.4	Partially
EU5	Allocation of CO ₂ e emissions allowances or equivalent, broken down by carbon trading framework.	Section 2, Section 5	Partially
3. Reporting Parameters			
3.1	Reporting period (e.g. fiscal/calendar year) for information provided.	Page 3	Fully
3.2	Date of most recent previous report (if any).	Page 3	Fully
3.3	Reporting cycle (annual, biennial, etc).	Page 3	Fully
3.4	Contact point for questions regarding the report or its contents.	Page 2	Fully
3.5	Process for defining report content.	Page 3, Section 2.5	Fully
3.6	Boundary of the report (e.g. countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Section 1, Section 2	Partially
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Section 1	Partially

3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations.	Section 1	Fully
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Section 9, Section 5.3	Partially
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g. mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Section 5.3,	Fully
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Section 1, Section 5.3	Fully
3.12	Table identifying the location of the Standard Disclosures in the report.	Section 2.4, Annual report Section 4	Fully
3.13	Policy and current practice with regard to seeking external assurance for the report.	Section 1	Partially
3. Governance, Commitments and Engagement			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight.	Section 7.0, Annual Report Section 4	Fully
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Section 7.0, Annual Report Section 4	Fully
4.3	For organisations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	Section 7.0, Annual Report Section 4	Fully
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Section 2.5, Section 7.0, Annual Report Section 4	Partially
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance).	Section 7.0, Annual Report Section 4	Partially
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Section 7.0, Annual Report Section 4	Fully
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Section 7.1	Partially
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Section 1.1, Section 2.1, Section 4.0, Section 6, Section 7	Fully
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Section 7.0, Annual Report Section 4	Fully

4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Section 7.0, Annual Report Section 4	Fully
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.		Not
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Section 2, Section 6, Section 7	Fully
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organisations in which the organisation: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Section 2, Section 6	Fully
4.14	List of stakeholder groups engaged by the organisation.	Section 2.5	Fully
4.15	Basis for identification and selection of stakeholders with whom to engage.	Section 2.5	Partially
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Section 2.5	Partially
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting.	Section 2.5	Fully
Economic Performance			
Aspects	Economic performance	Section 1, Section 8, Annual Report Section 2 and Section 5	Fully
	Market presence	Section 8	Fully
	Indirect economic impacts	Section 6, Annual Report page 8,	Fully
	Availability and reliability	Section 2	Fully
	Demand-side management	Section 2	Fully
	System efficiency	Section 2	Fully
	Research and development	Section 2	Fully
	Plant decommissioning		NA. ESB has no immediate plans for decommissioning of plant
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Section 8	Fully
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Section 6, Section 7, Section 2	Fully
EC3	Coverage of the organisation's defined benefit plan obligations.	Section 8, Annual Report	Partially
EC4	Significant financial assistance received from government.	Section 8, Annual Report	Partially
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.		Not
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.		Not

EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.		Not
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Section 2, Section 6	Partially
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Section 2, Section 6	Partially
EU6	Management approach to ensure short and long-term electricity availability and reliability	Section 2	Fully
EU7	Demand-side management programs including residential, commercial, institutional and industrial programs.	Section 2	Fully
EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.	Section 2	Fully
EU9	Provisions for decommissioning of nuclear power sites.		NA. ESB does not own any nuclear power sites
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime.		Not
EU11	Average generation efficiency of thermal plants by energy source and regulatory regime.		Not
EU12	Transmission and distribution losses as a percentage of total energy.		Not
Environmental			
Aspects	MaterialsCOMM	Sec 5.10	Fully
Aspects	Energy	Section 2	Fully
Aspects	WaterCOMM	Section 5	Fully
Aspects	BiodiversityCOMM	Section 5	Fully
Aspects	Emissions, effluents and wasteCOMM	Section 5	Fully
Aspects	Products and services	Section 2	Fully
Aspects	Compliance	Section 5.13	Fully
Aspects	Transport	Sec 5.7, 5.8	Fully
Aspects	Overall	Section 2, Section 5	Fully
EN1	Materials used by weight or volume.		Not
EN2	Percentage of materials used that are recycled input materials.		Not
EN3	Direct energy consumption by primary energy source.	Section 2	Fully
EN4	Indirect energy consumption by primary source.		Not
EN5	Energy saved due to conservation and efficiency improvements.		Not
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Section 2	Partially
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Section 2	Partially
EN8	Total water withdrawal by source.		Not
EN9	Water sources significantly affected by withdrawal of water.		Not
EN10	Percentage and total volume of water recycled and reused.		Not

EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Section 5.9	Fully
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Section 5.9	Partially
EN13	Habitats protected or restored.		Not
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Section 5.9	Fully
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.		Not
EN16	Total direct and indirect greenhouse gas emissions by weight.	Section 5.4	Partially
EN17	Other relevant indirect greenhouse gas emissions by weight.	Section 5.3, Section 5.4	Partially
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Section 2, Section 5.3	Partially
EN19	Emissions of ozone-depleting substances by weight.		Not
EN20	NOx, SOx, and other significant air emissions by type and weight.	Section 5.3	Fully
EN21	Total water discharge by quality and destination.		Not
EN22	Total weight of waste by type and disposal method.	Section 5.6	Partially
EN23	Total number and volume of significant spills.		Not
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.		Not
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Section 5.9	Partially
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Section 5.10	Partially
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.		NA. Electricity has no associated packaging material
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	No fines or significant breaches of licence in 2013, Section 2	Fully
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Section 5.7, Section 5.10	Partially
EN30	Total environmental protection expenditures and investments by type.		Not
EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas		Not
Labour Practices			
Aspects	Employment	Section 4	Fully
	Labor/management relations	Section 4	Partially
	Occupational health and safety	Section 3	Fully
	Training and education	Section 4	Fully

	Diversity and equal opportunity	Section 4	Fully
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	Section 4	Partially
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.		Not
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		Not
LA4	Percentage of employees covered by collective bargaining agreements.		Not
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.		Not
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Section 3	Fully
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Section 3	Partially
LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Section 3	Partially
LA9	Health and safety topics covered in formal agreements with trade unions.		Not
LA10	Average hours of training per year per employee by gender, and by employee category.		Not
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Section 4	Partially
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	Section 4.5	Fully
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Section 4	Partially
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.		Not
LA15	Return to work and retention rates after parental leave, by gender.		Not
EU14	Programs and processes to ensure the availability of a skilled workforce.	Section 4	Fully
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.	Section 4	Partially
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.	Section 3	Partially
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities.		Not
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.	Section 3	Partially

Human Rights			
		Section 6.10 outlines ESB's approach to the protection of Human Rights	NA. ESB's primary focus for capital investment is Europe and the vast majority of goods and services are sourced in EU countries. ESB does not address human rights issues explicitly in contracts given the extensive body of legislation that exists within Europe and the ease of access to remedial measures.
Social			
Aspects	Community	Section 6	Fully
	Corruption		Not
	Public policy		Not
	Anti-competitive behavior		Not
	Compliance		Not
	Disaster/Emergency planning and response		Not
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	section 6	Partially
SO9	Operations with significant potential or actual negative impacts on local communities.		Not
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.		Not
SO2	Percentage and total number of business units analysed for risks related to corruption.	Section 7	Not
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures.		Not
SO4	Actions taken in response to incidents of corruption.		Not
SO5	Public policy positions and participation in public policy development and lobbying.	Section 2	Partially
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.		Not
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.		Not
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.		Not
EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development.		Not
EU20	Approach to managing the impacts of displacement.		Not
EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans.	Section 4	Not
EU22	Number of people physically or economically displaced and compensation, broken down by type of project.		NA. ESB main operations are in Ireland and UK. ESB is not involved in any project involving displacement of people

Product Responsibility			
Aspects	Customer health and safety	Section 3	Fully
	Product and service labelling	Section 2.4	Partially
	Marketing communications	Section 2.1	Fully
	Customer privacy		Not
	Compliance		Not
	Access	Section 2	Partially
	Provision of information	Section 2	Fully
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Section 3	Partially
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.		Not
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.		Not
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.		Not
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.		Not
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.		Not
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.		Not
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.		Not
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.		Not
EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.	Section 2	Fully
EU24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services.		Not
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases.	Section 3	Partially
EU26	Percentage of population unserved in licensed distribution or service areas.		Not
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.		Not
EU28	Power outage frequency.		Not
EU29	Average power outage duration.		Not
EU30	Average plant availability factor by energy source and by regulatory regime.		Not

SECTION 9.3 GLOSSARY OF TERMS

Abbreviated Term	Explanation
AMR	Automated Meter Reader
BSC	Division of ESB called Business Service Centre
BWR	Business Working Responsibly Award
CCGT	Combined Cycle Gas Turbine
CDP	Carbon Disclosure Project
CER	Commission for Energy Regulation (ROI)
Coillte	A commercial company operating in forestry, land based businesses, renewable energy and panel products and owns over 1 million acres of forest on behalf of the Irish Government
Colleges	3rd Level Colleges including UL – University of Limerick, UCD – University College Dublin, TCD – Trinity College Dublin, NUI – National University of Ireland
CVR	Conservation Voltage Reduction
DCENR	Department of Communications, Energy and Natural Resources (ROI)
DoE	Department of Environment (NI)
EAI	Electricity Association of Ireland
EirGrid	Republic of Ireland System Operator
EMS	Environmental Management System
EPA	Environmental Protection Agency (ROI)
EPRI	Electricity Power Research Institute (USA)
Eurelectric	The Union of the Electricity Industry - EURELECTRIC is the sector association which represents the common interests of the electricity industry at pan-European level
EV	Electric Vehicle
FGD	Flue-Gas De-Suphurisation
FINESCE	Future Internet Smart Utility Services is the smart energy use case project of the Future Internet Public Private Partnership funded by the EU
GIS	Gas Insulated Switchgear
GTS	Generation Trading & Supply

GWM	Division of ESB called Generation & Wholesale Markets
HSA	Health and Safety Authority (ROI)
IBEC	Irish Business and Employer Confederation
IFA	Irish Farmers Association
IPPCL	Integrated Pollution Prevention and Control Licence
IWEA	Irish Wind Energy Association
LTI	Lost Time Injury (in ESB defined as being absent from work on the next planned shift/day)
MCA-T	Millennium Challenge Account Tanzania
NO _x , SO _x , SF ₆	Nitrous Oxides, Sulphur Dioxides, Sulphur Hexafluoride
NPWS	National Parks and Wildlife Service (ROI)
PAYG	Pay As You Go meter
RAB	Regulated Asset Base
SCR	Selective Catalytic Reduction
SEAI	Sustainable Energy Authority of Ireland
SEM	Single Electricity Market in Republic of Ireland and Northern Ireland
SONI	System Operator Northern Ireland
UREG	Utility Regulator for Northern Ireland
VGB	European technical association for power and heat generation - a voluntary association of companies for which power and heat generation is the basis of their business

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