

There comes a point in any long journey when you need to see how far you've come. This is one of those points.

Leading the Energy Change  
Annual Sustainability Performance  
Report 2010

Save today. Save tomorrow.



The Energy Change isn't a journey from A to B. It's a journey from one mindset to another. A huge shift that's started a big conversation that affects everyone. A change that will make us question what really matters and what needs to be done.

One important step is that instead of thinking of energy as a commodity, we're now realising how powerful it is and how it has to be cherished and shared by everyone.

Sometimes, the Energy Change will seem gradual. Other times, huge. Occasionally we'll feel small compared with the enormity of it all. But we should take comfort from standing back and seeing the bigger picture.

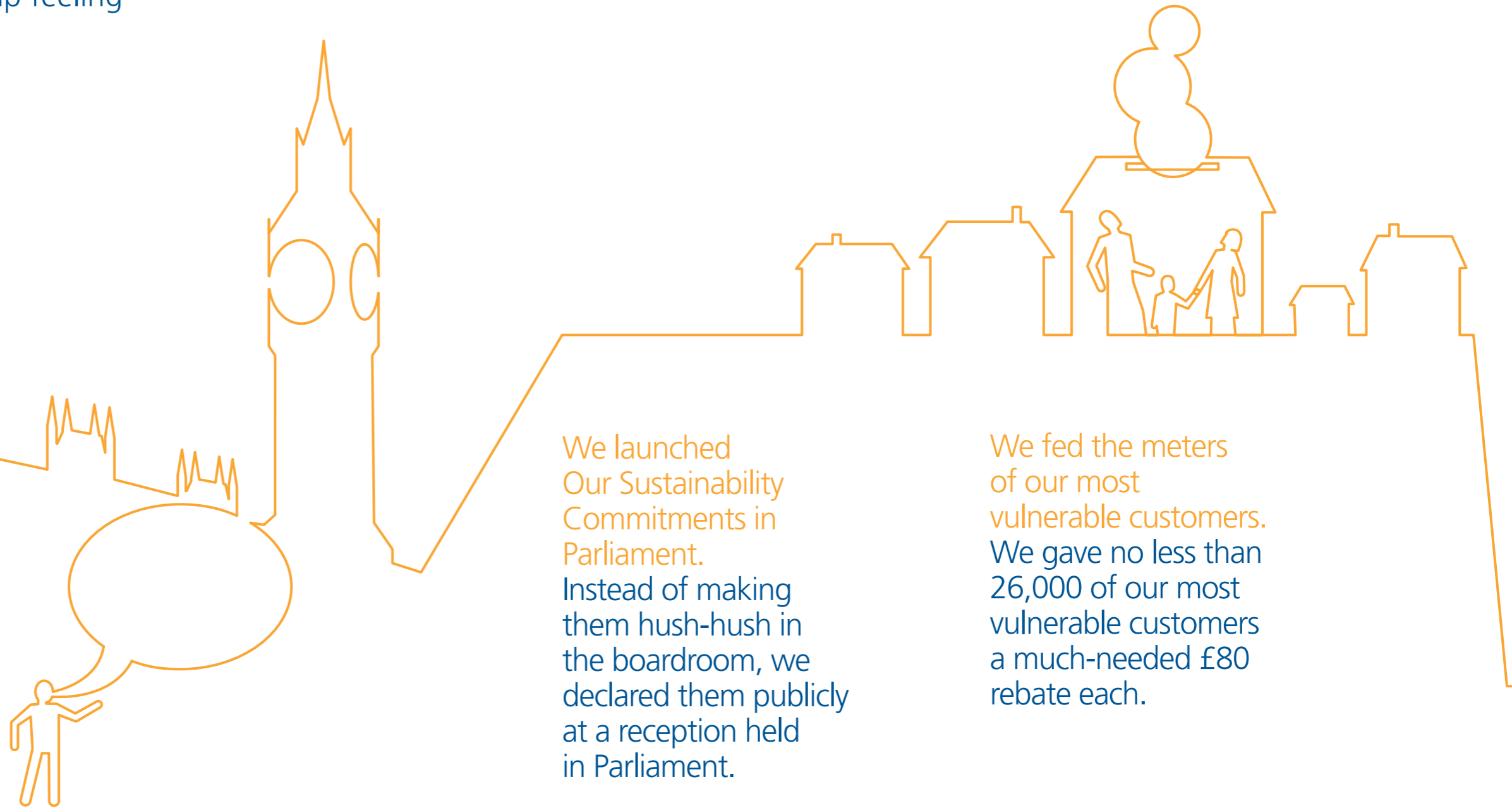
We're not the only ones who want to make a difference. The momentum is growing. More and more people are becoming inspired to act because they feel compelled to take part. Each one of us is beginning to realise the power of the crowd. It means joining in. And that includes us.

We may not be around to see the journey's end, but our children will be.



## There is a great deal that we are proud of in 2010.

Even though there's a lot more to do, much has been achieved. And when we look back on the challenges we faced in 2010, we can't help feeling proud of the high points.



We launched Our Sustainability Commitments in Parliament. Instead of making them hush-hush in the boardroom, we declared them publicly at a reception held in Parliament.

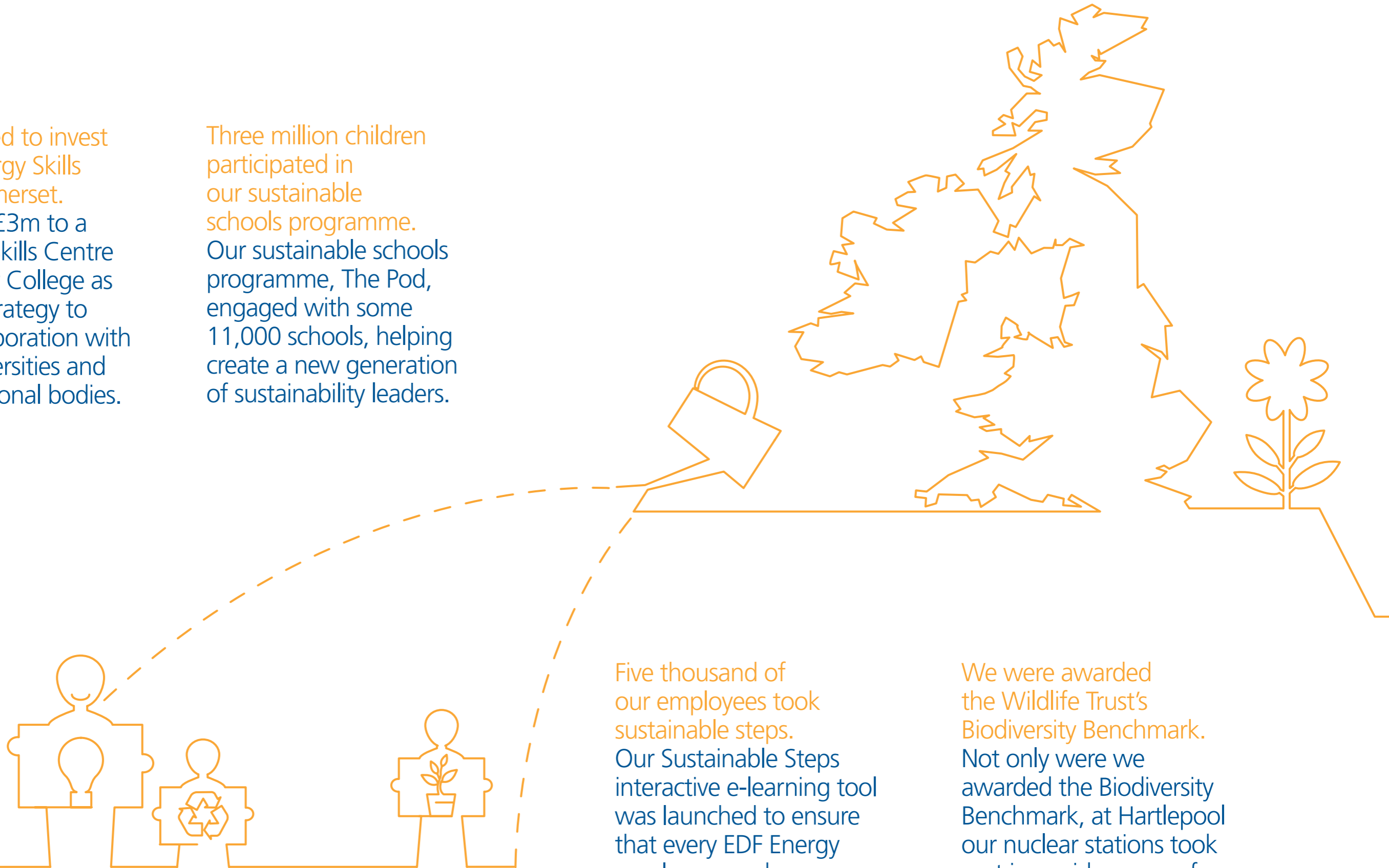
We fed the meters of our most vulnerable customers. We gave no less than 26,000 of our most vulnerable customers a much-needed £80 rebate each.

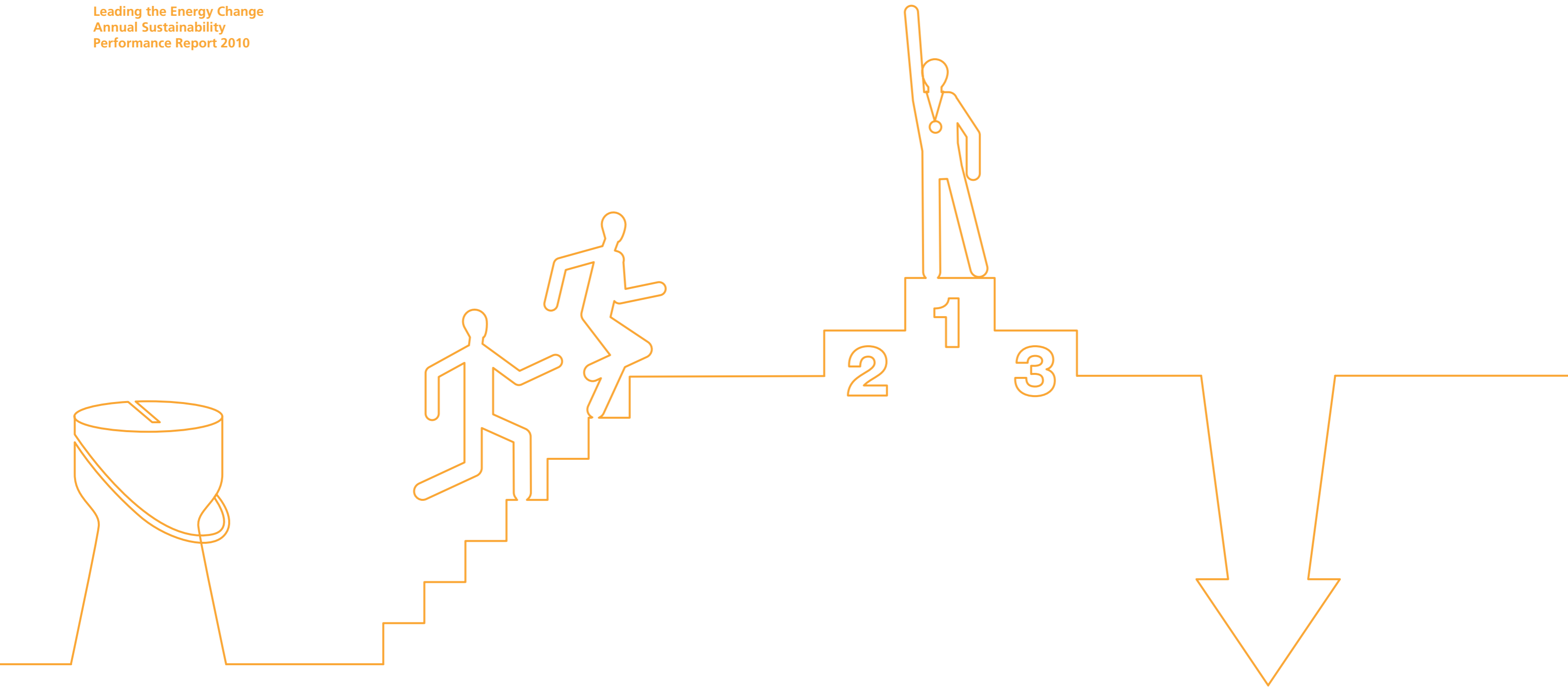
We committed to invest in a new Energy Skills Centre in Somerset. We pledged £3m to a new Energy Skills Centre at Bridgwater College as part of our strategy to work in collaboration with schools, universities and other educational bodies.

Three million children participated in our sustainable schools programme. Our sustainable schools programme, The Pod, engaged with some 11,000 schools, helping create a new generation of sustainability leaders.

Five thousand of our employees took sustainable steps. Our Sustainable Steps interactive e-learning tool was launched to ensure that every EDF Energy employee can become a sustainability champion. By 2012, 100% of them will know how to play their part.

We were awarded the Wildlife Trust's Biodiversity Benchmark. Not only were we awarded the Biodiversity Benchmark, at Hartlepool our nuclear stations took part in a wide range of biodiversity programmes.





We scored 97% in the Business in the Community Corporate Responsibility Index. Our approach to sustainability was awarded Platinum Plus, the highest possible standard, and it placed us as best in our sector.

We continued our sustainability efforts for the Games. Well before 2012, as the first sustainability partner of the London 2012 Olympic and Paralympic Games, we continued working on making the games more sustainable, seeking an enduring legacy.

We cut the carbon intensity of our electricity generation. We reduced our carbon emissions from electricity generation from 813g/kWh in 2006 to 218g/kWh in 2010.

Your views are important to us as they help us improve the way we do things. Let us know your thoughts and whether you found what you wanted to know about by contacting us at [sustainability@edfenergy.co.uk](mailto:sustainability@edfenergy.co.uk). Your feedback will be reviewed by our Sustainability team and used to improve reporting for the future.



“There is no more pressing issue confronting the world today than climate change. As we ask ourselves what kind of planet we are leaving our children, so we must also ask what kind of children we are leaving our planet. This is a human challenge – not just a technical one. By acting now and acting together, we can rise to the challenge and tackle climate change head on”

**Vincent de Rivaz**  
EDF Energy Chief Executive Officer  
June 2010

**CEO statement**  
**EDF Energy 2010**  
**Sustainability Report**

In our 2009 Sustainability Report, I set out the human and technical challenge of tackling climate change head-on. In June 2010, we launched Our Sustainability Commitments at a reception in Parliament, specifying in measurable ways how this company will play its part in meeting that challenge. I was pleased the launch was attended by representatives of the three main political parties and received endorsement from numerous other external stakeholders.

We have developed our sustainability strategy to help us strike the right balance for investors, for our employees and for our customers. Our challenge for 2011 is to continue our work towards meeting, or exceeding, these commitments which, although it will not be easy, I am confident we will be able to do.

Before reviewing 2010, I want to acknowledge the human tragedy that occurred in Japan in March 2011 following the earthquake and tsunami. This incident must never be forgotten and I was particularly proud of the leadership and humanitarian support provided to the people of Japan by my colleagues in all parts of EDF.

Following the events which affected the Fukushima power plant our challenge is to continue to demonstrate our 100% commitment to safety in everything we say and do. We have made clear that we will implement all the recommendations from the Government's Chief Nuclear Inspector, Dr Mike Weightman's, report and we welcomed his conclusion that there was no reason to curtail the operation of existing plants and that new nuclear will still be part of the UK's future energy mix.

Our number one priority in 2010 was our continued focus on safety. Most notable was our Lost-Time Incident rate which fell by 36% in 2010 compared to 2009, and has decreased by more than 80% since 2005. This is good progress. However, sadly I have to report that one of our colleagues, Chris Cowan, died in an accident at his workplace, Heysham 1 Power Station. This tragedy again reinforces our strongly held belief that we can never become complacent when it comes to health and safety.

The latter part of 2010 saw our company structure change significantly with the sale of our electricity distribution network. While the right step for the EDF Group strategy, it was an emotional time as we said goodbye to our colleagues from EDF Energy Networks and expressed to them our thanks and appreciation.

Our emphasis throughout was to ensure that the needs of our people were prioritised while maintaining our emphasis on safety and performance.

Our Nuclear New Build business reached several important milestones in 2010. The Government announcement on electricity market reform in December, following the Parliamentary vote in support of Regulatory Justification for new nuclear build, was a major landmark towards achieving secure, low-carbon and affordable energy for all customers. The reform will provide more certainty to encourage investment in low-carbon generation and will also help to shield consumers from higher costs in the future.

As a company, we are acutely aware of our responsibility to the communities we serve and the environment we share. We have committed to keeping prices competitive and were the only company to help customers when they needed it most by freezing our prices over the winter of 2010/11. In addition, our Energy Assist tariff now benefits more than 165,000 of our most vulnerable customers.

I am also pleased to report that the first of Our Sustainability Commitments has been achieved. Our sustainable schools programme, The Pod, has engaged with more than three million schoolchildren across Britain, meeting its target two years ahead of schedule.

We are extremely proud of this achievement and our partnership with Eco Schools which has made this a reality and we will continue to build on this success.

Another commitment is to support the development within the UK of the skills necessary to sustain our low-carbon generation business. During 2010 we worked extensively with schools, universities and other bodies to boost STEM (Science, Technology, Engineering and Maths) skills. Our £3 million investment in a state-of-the-art Energy Skills Centre at Bridgwater College in Somerset, to support our new build plans at Hinkley Point, will help provide the training necessary to secure skilled jobs for local people.

As we promised back in 2007, we will continually review our commitments, and strengthen them as necessary. In summer 2011, we will begin work on reviewing our commitments with a view to meeting the challenges for 2012 and beyond. This will enable us to continue to be a leader in sustainability and play a major role in addressing the global challenges facing our company, our industry and our country, and help us genuinely achieve our ambition of becoming a leader in sustainability.

I hope this report will inspire those reading it as we continue our journey together towards a low-carbon Britain.

## Challenges

We must collaborate to address global challenges and act together to make change a reality. We have started but there is more to do.

This report highlights how we are embedding sustainability in our business and how collaboration is driving change. It's key to all of our futures, though not without challenge. Doing nothing is not an option.



### Challenges

The carbon challenge  
Our business  
Approach to reporting  
Governance  
Stakeholder material issues

### Ambitions

### Commitments

### Nuclear

### Assurance

### Definitions

#### Leading the Energy Change

The sustainability challenges facing the energy industry are huge. Climate change, energy affordability and security of supply are global issues that require the complete transformation of our company, our industry and our nation. We believe that the challenge can be met through greater energy efficiency and the generation of electricity from a diverse range of sources, including nuclear and renewable, as well as the empowerment of our customers and society at large.

This is as much a human and social challenge as it is a technical and economic one. And now, as one of the largest energy companies in the UK, we are in a unique position to create and help deliver an inspiring vision for the future. We believe that embracing the need to think beyond short-term profits and engage positively in our role in society helps to define our company and differentiate us from our competitors. For us, leadership is about collaboration to drive change across the industry and beyond – not just about doing better than our competitors.

We believe that fuel-mix diversity, including clean coal, clean gas, nuclear and renewable, is important for long-term security of electricity supply in the UK.

All technologies will be needed to deliver the transition to a low-carbon economy. For more detailed information on our energy mix please visit:

#### [Our Fuel Mix](#)

Our strategy centres on being a leader in affordable, low-carbon energy solutions. Our quality of life today relies on secure and affordable energy, but our future depends on developing new, truly sustainable low-carbon energy sources. We have to satisfy the needs of affordability and security of supply at the same time as addressing climate change.

#### For us, sustainability means:

- Providing the energy which is vital to society in a way that better protects the natural environment we all depend on
- Securing affordable low-carbon energy for the long-term
- Taking our responsibilities to our customers seriously
- Protecting those who need help, and reducing the environmental impact of our customers' energy usage
- Maintaining a sustainable, profitable business in the long-term, the only way we can invest for the future
- Constantly improving the efficiency of our operations, and our resource and waste management
- Developing and transferring the skills of our people

Sustainability leadership means responding courageously and constructively to the world's most critical social, ecological and economic challenges. It means enhancing life today without compromising life tomorrow. It means operating our business in a genuinely sustainable way.

We have a huge contribution to make by reducing the carbon intensity of electricity generation, by managing our own carbon footprint and by engaging our stakeholders in this process of change.

While we work towards this secure, affordable, low-carbon future, we will make sure we support our most vulnerable customers (who may struggle with energy costs), and ensure openness and transparency in all that we say and do.

## The carbon challenge

We operate in a complex and competitive environment. One of the biggest challenges for our sector is the need to rapidly decarbonise the energy sector in response to climate change.

The UK is legally committed to achieving 80% reductions on its 1990 levels of carbon dioxide emissions by 2050. In 1990, these emissions totalled nearly 600 million tonnes (mt).

To do this requires an energy revolution, involving:

- a radical drive on energy efficiency in people's homes and offices
- radical changes in the way we generate electricity
- radical changes in the transport and heating sectors

While addressing these challenges, we must also protect the most vulnerable people in our society from rising energy bills. Over four million UK households are currently estimated to be living in fuel poverty and, as our regulator, Ofgem, have recognised, the cost of investment in new, low-carbon infrastructure is likely to mean higher prices for consumers.

We have a responsibility to deliver these required emissions reductions with lowest costs, and as a responsible energy company we will do all that we can to help the UK meet its 80% carbon reduction target. It is estimated that globally a record 30.6<sup>1</sup> gigatons (Gt) of CO<sub>2</sub> was emitted into the atmosphere in 2010 – a 5% increase from the previous record year in 2008, when levels reached 29.3Gt. This is why we need to consider alternative, decarbonised, fuel generation options. For more detailed information on our current energy mix please visit: [Our Fuel Mix](#)

<sup>1</sup>According to the latest estimates in 2010 by the International Energy Agency (IEA)

EDF Energy has a vision to lead the energy change in the UK. And our business model must be profitable and economically sustainable if we are to make the huge investments necessary for our future.

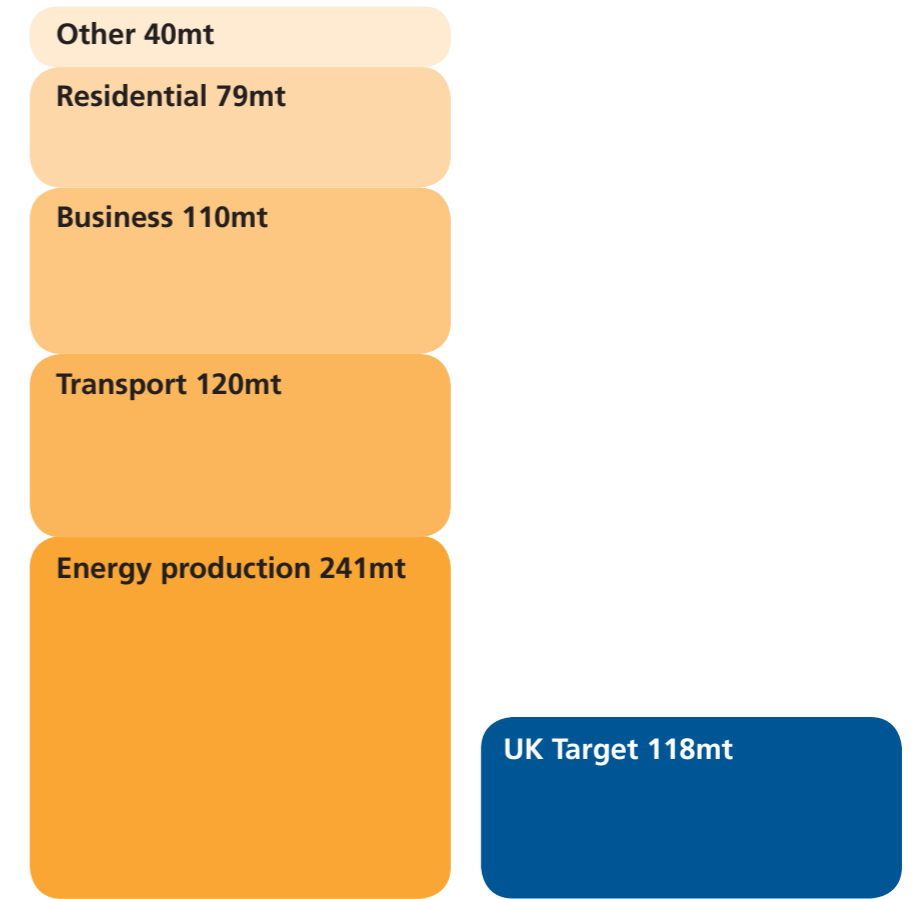
**Our approach to sustainability will increase value and competitive advantage for us through:**

- Earning stakeholder trust and confidence
- Shaping, not simply responding to, new regulation
- Increasing our share of the growing decarbonised electricity market
- Supplying decarbonised electricity to emerging transport and heating markets
- Realising cost and operational efficiency gains from cutting waste
- Increasing employee and customer engagement, acquisition and loyalty
- Earning a corporate leadership reputation.

As the challenges accelerate, so will the competitive advantages of leading the energy change.

## The challenge

1990 total UK CO<sub>2</sub> emissions  
590mt



**Note:** The 2050 target is UK net CO<sub>2</sub> emissions and not the equivalent GHG  
Source: DECC

2050 target UK CO<sub>2</sub> emissions



## Our business

EDF Energy is one of the UK's largest energy companies and the largest producer of low-carbon electricity. We produce around one sixth of the nation's electricity from our nuclear, coal, gas and combined heat and power plants, and wind farms.

We supply gas and electricity to more than 5.5 million business and residential customers and are the largest supplier of electricity by volume in the UK<sup>2</sup>.

The integration of the former British Energy into EDF Energy is now complete, with fully functioning business units and structured reporting lines. Our executive management team now leads three main business units: Energy Sourcing and Customer Supply (ESCS), Nuclear Generation (NG), and Nuclear New Build (NNB). These business units are supported by two steering functions and two corporate functions.

In October 2010 we sold our electricity distribution network to the Cheung Kong Group (CKI). The transfer was finalised for an equity value of £3.2 billion (€3.7 billion), representing a €6.7 billion reduction in net debt for the Group.

Following this sale, we now have over 15,000 employees, in various locations in the UK. Our Nuclear New Build team, in particular, has increased in size and now has over 200 employees.

We are leading the UK's nuclear renaissance. We have proposed plans to build four new nuclear plants in the UK. The project is already creating business and job opportunities for British companies and workers.

We are also taking a lead role in discussions with the Government on market reform. This will support the UK's existing generation capacity and provide a framework under which nuclear new build can be successfully achieved.

<sup>2</sup>Excludes Northern Ireland

## Business strategy

We operate in a complex environment characterised by volatile commodity markets, high levels of competition and, despite liberalisation, Government interventions to deliver changing energy objectives. In spite of the current economic downturn, demand for electricity is expected to increase in the long term as decarbonisation policies prompt fuel switching from gas and oil to low-carbon electricity, particularly in the heat and transport sectors.

We sell power to two major customer groups – residential and business customers. Business customers range from large industrial businesses to small privately owned businesses. Sales to residential customers are described as the Business to Customer segment (B2C) and sales to businesses are described as the Business to Business segment (B2B). We adopt different risk management strategies for B2C and B2B activities.

B2C tariffs tend to follow the overall trend of commodity prices over the long term but do not reflect their short term volatility. As a result, a hedging strategy that efficiently smoothes market volatility is regarded as a key competitive factor for all electricity and gas suppliers in the UK market.

We cut our prices in March 2010, with B2C standard variable gas customers seeing their prices fall by 4%. In October 2010 some standard variable electricity prices were increased by 2.6%, but this depended on which region of the country customers lived in<sup>3</sup>; this change was implemented to make our electricity prices more reflective of the underlying increase in distribution costs.

In November 2010 we announced a winter price freeze for B2C customers until at least 1 March 2011. This reflected our willingness to protect our customers from significant price increases in the middle of winter. We aim to differentiate ourselves from our competitors, most of whom increased their tariffs over the winter period. This is good for our customers and for our business. In February 2011 we announced a price increase that from 2 March our standard domestic residential prices would rise by an average of 6.5% for gas customers and 7.5% for electricity customers.

### Adding value

We seek to add business value through continued operational excellence, achieving maximum return from nuclear generation and coal assets, increasing downstream profitability, and by leading the revival of new nuclear build in the UK.

<sup>3</sup>Affected approximately 1.2 million customers

We plan to build four new European Pressurized Reactors (EPR) in the UK, subject to the right investment conditions. We are playing a key role in current discussions with the UK Government on the electricity market reform required to support these investments.

Developing and retaining high performing people remains central to our core values and business strategy. To support our significant plans for investment in the UK, we expect to recruit significant numbers of new employees in the next few years.

Centrica plc ("Centrica") holds a 20% stake in Lake Acquisitions Limited, the company within which the Nuclear Generation (NG) business unit sits. Centrica also holds a 20% stake in NNB Holding Company Limited, the company which has been created to undertake the pre-development activities for our nuclear new build programme in the UK. These transactions will hereafter be referred to as the "Centrica Transactions". EDF and Centrica intend this joint venture to construct, operate and decommission four EPRs in the UK.

For more information on our structure please visit: [About Us](#)

## Our approach to sustainability reporting

Our 2010 Sustainability Performance Report outlines the progress we have made in leading the energy change so far. It reports publicly on our vision, mission, ambitions and sustainability commitments in an integrated summary.

### Our audience

The report is intended for all our key stakeholders: customers, employees, business partners, suppliers, public bodies, opinion formers, trade unions and Non-Governmental Organisations.

### Reporting scope and boundary

When reporting at an EDF Energy (UK) Limited level we have included 100% of the non-financial performance for each entity where we have control of 50% or more of Board Directors or Board level voting rights in that site or company, and rights to 50% or more of the economic benefits (e.g. profit) derived from it.

From 2011 we will align non-financial reporting with the approach of the Financial Reporting Standards methodology to create a consistent standard for reporting of financial and non-financial performance. We will clearly and transparently state the reporting approach in all documents and reports we publish.

As a subsidiary of EDF Group, EDF Energy is not listed on the London Stock Exchange and we are not obliged by law to comply with Stock Exchange rules or to adopt the same standards as listed companies. However, as a subsidiary of EDF Group which is listed in Paris, we have certain obligations under Autorité des Marchés Financiers (AMF) Regulations and we will always seek to operate to the highest standards. As examples, we have voluntarily embraced various reporting principles and standards, including the Combined Code and the Turnbull Guidelines on risk management. For more detailed information, please visit our website:

### [Corporate Governance](#)

This online report focuses on the sustainability issues we assessed as the most material ones to our business and key stakeholders. It concentrates on those key issues. We have tried to remain objective and report in an open, honest and balanced way.

### Reporting period

The 2010 Sustainability Performance Report covers the period of 1 January, 2010 to 31 December 2010 unless stated otherwise. It is a summary document so it will sometimes refer to more detailed information that is available elsewhere online.

### Reporting measurement approaches

We have used the best available national or international methodologies and techniques for measurement, calculation and analysis. For example, we use the World Association of Nuclear Operators (WANO) definitions and approaches to reporting our nuclear safety performance; we comply with DEFRA-approved approaches for calculating CO<sub>2</sub> emissions; and recognised national and international-approved methodologies for employee incident rates and manufacturers' recommendations for eco-efficiency savings.

We also employ data measurement experts to ensure transparency on the scope and boundaries of reporting – and to standardise calculations for robust and credible data. We want to fairly represent business performance levels and achievements. We support the principles of the Prince of Wales Accounting for Sustainability Connected Reporting Framework and have considered this in our internal and external reporting.

Our Business Performance Team has undertaken an internal assurance process to verify that reported data is consistent and accurate, and to ensure that all information provided to our stakeholders is credible and transparent.

Our report has changed to reflect the integration of the former British Energy business and the sale of our Networks business. It includes performance data for the period of networks ownership unless specified otherwise. Three of 'Our Sustainability Commitments' were directly attributable and linked to our former networks business and after the sale, were removed from our commitments. These are:

- We will eliminate waste sent to landfill from street works by 2020
- We will lead the industry in protecting vulnerable customers from the adverse effects of power cuts
- We will extend our health and safety activity to support children, community groups and our customers

We have also reviewed how we report the quantity of CO<sub>2</sub> produced from the use of energy in buildings and transport use given that the size and nature of our company has changed. This has changed significantly since we first made our climate commitments in 2007, most significantly through the acquisition of British Energy and the sale of our Networks business.

So, in addition to declaring the absolute quantity of CO<sub>2</sub> produced in tonnes, we have also decided to declare the quantity of CO<sub>2</sub> produced per full time equivalent employee (FTE which, for EDF Energy, is a good indicator of the scale of our business).

We will continue to review and revise our commitments as our journey evolves and we have already planned a further review starting in summer 2011 which will look at the challenges we face after 2012 and how we will deliver our sustainability leadership ambition.

## Risk management

By controlling and managing risks, we are better able to shape a low-carbon future.

Our internal control and risk management framework allows us to:

- Identify, evaluate, control and report significant risks
- Implement a comprehensive, consistent, company-wide approach to risk management
- Maintain a register detailing risks to our businesses, support functions, appropriate controls, remedial action plans; and
- Promote control of risk as a fundamental business process.

We believe that by controlling and managing our risks well we can better shape a low-carbon economy in the UK.

We have already responded by creating our energy services team to grow a customer-facing business in this area, and developing expertise and low-carbon products and services. Other opportunities include:

- Increased revenue streams through the provision of energy efficiency products and services to customers, for example through the UK Government's low-carbon Buildings Programme and other micro-generation support packages; and
- Building solution and business orientated packages that respond early to regulation and provide micro generation and renewable heat solutions to homes and business, supported by Government policies.

### Market framework and political risks

In order for EDF Energy and other companies to commit to low-carbon investment (to address climate change and security of supply concerns) there needs to be a market framework which ensures that a sustainable return can be made.

This requires action at a UK Government level, for example, on the price of carbon. To mitigate market framework risks, we have responded to consultation documents, conducted detailed analysis of the impact of potential reforms of the market, and established a Market Reform Project Group to inform stakeholders on areas of strategic impact.

It is important that the UK political process ensures continuity in energy policy and planning to avoid any delay to the building of new nuclear power stations. So it is vital that the UK Government's National Planning Statements are finalised as soon as possible. It is also important that the planning system can provide timely decisions on planning applications while also providing for appropriate consultation with local communities.

### Regulatory risks

While we operate in highly competitive markets we must also comply with rules and regulations set by Ofgem, the energy industry regulator. We are therefore exposed to regulatory risks where external decisions or changes to regulatory regimes and industry policies could affect our operations.

As a diverse energy company that generates and supplies electricity and gas to residential and business customers, we must manage these risks and look for ways to shape and not simply respond to regulation. We have in place the appropriate expertise, policies and compliance frameworks to work proactively with Ofgem and other Government bodies to ensure we are at the forefront of evolving regulation and legislation.

### Operational risks

The safe operation of all our offices, depots and sites involves identifying and managing operational risks. Safety is our number one priority.

We have done extensive work to ensure operational safety and excellence of our nuclear power stations. Building four new nuclear power reactors – two at Hinkley Point and two at Sizewell – will be a substantial operational challenge. We will need skilled engineers, a strong supply chain and partners, and an effective regulatory framework.

In order to meet these challenges we have established a Nuclear New Build Business Unit to manage the programme in partnership with our parent company. We are also developing a diverse range of skills programmes to enable us to rise to this challenge.

### Health and safety risks

We strive to run all our offices, depots and sites with the safety of our employees and communities in mind. Our maintenance programmes ensure that they operate safely and properly to minimise risk. We also have security in place at all our major sites to prevent malicious damage that could disrupt national energy supply or endanger our employees or the local community. We have developed emergency planning processes known as Business Continuity Programmes for each of our sites to ensure reliable and safe operations during all circumstances.

Our plans are fit for purpose, business driven and business owned. They provide a strategic and operational framework that:

- Proactively improves our resilience against any disruption
- Provides a rehearsed method for restoring our capacity to supply our key products and services to an agreed level within an agreed time
- Delivers a proven capability to manage business disruption; and
- Protects our reputation and credibility

### Sustainability risks

We manage risks to delivery of Our Sustainability Commitments through our project management methodology across our operations. Achieving Our Sustainability Commitments will require strong engagement from all stakeholders including our employees. To achieve our carbon and waste reduction commitments we need to create behavioural change by building a world-class sustainability culture, with programmes that ensure our people make best practice normal practice.

To achieve our communities commitment, we have also developed open and transparent stakeholder engagement policies, and we collaborate with local communities, on a wide range of subjects. We have developed the Pod website – an online hub to engage local schools and school children in the sustainable use of energy.

Our Energy Sourcing and Customer Supply Business Unit is helping to find ways of addressing fuel poverty. It has identified our most vulnerable customers and introduced special measures to protect them during power cuts, provided access to energy efficiency and debt management advice, priority services and discounted tariffs.

## Governance

We want to be held accountable for the commitments we're making. This is central to ensuring we keep our promises.

That is why we will report annually with an independent audit of progress. We will be at the forefront of the climate change debate in the UK. We will be open in our dialogue with our stakeholders and in our communications, and we will be answerable for the commitments made. For more information on our corporate governance please visit:

[Corporate Governance](#)

### How corporate governance works in EDF Energy

Our Board is responsible for providing effective corporate governance policies and is ultimately accountable for every decision made. It delegates the authority to make decisions to the Chief Executive (who reports directly to the Board). Acting on the Board's behalf, our Executive Team ensures that our corporate governance policies and all other systems of internal control, performance reporting and risk management are implemented correctly.

The Board is responsible for ensuring that EDF Energy meets its financial and legal obligations while sustaining and enhancing the value we create for our shareholders. The Board meets quarterly to decide our strategy, budget and financial requirements. The Board's remit also covers the policies that we develop to support our strategy, such as our corporate governance policy. For more information please visit:

[About Us](#)

We operate a company incentive plan (bonus plan) for all employees, including our Executive Team. This is approved by the Company Remuneration Committee. It comprises a balanced set of measures relating to our six Ambitions. One of these criteria is 'to be a leader in sustainability' at company and business unit level. Typically 30% of the bonus is determined by company and business unit financial performance, with the remaining 70% judged against performance across the company's other Ambitions. For more information please visit: [Ambitions](#)

### Governing sustainability performance

We have established several bodies to oversee delivery of our sustainability agenda.

The first is our Sustainable Development Committee (SDC), which is chaired by our CEO. Its purpose is to provide company-wide leadership in the delivery of EDF Energy's sustainability ambitions.

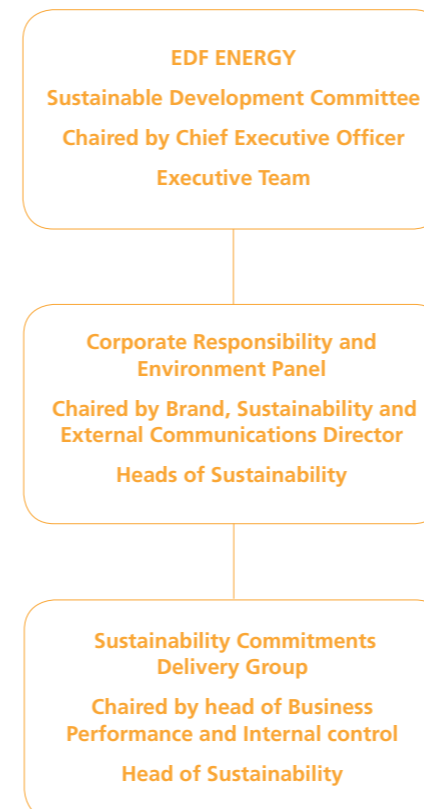
The second level is our Corporate Responsibility and Environment Panel chaired by our Brand, Sustainability and External Communications Director. This has senior representation from sustainability teams from each of our business units.

The group discusses and agrees our sustainability policy and directs delivery of key sustainability projects and programmes. It also reviews business performance on sustainability targets.

The third group is our Sustainability Delivery Group. This is chaired by our Head of Business Performance and Internal Control. The group reviews and challenges delivery of our sustainability performance and ensures business awareness of Our Sustainability Commitments.

The material issues these groups discussed and provided direction on in 2010 are outlined in the table on the following page.

For more detailed information on our sustainability governance please visit: [Sustainability Governance](#)



## Material issues discussed in 2010

DISCUSSION POINT	CHALLENGE	OUR ACTION
Impact of sale of networks business on Our Sustainability Commitments	Ensure performance data for revised company is transparent and reflects new company structure	Review of Sustainability Commitments and removal of three commitments which were directly attributable to networks
Expiry of some of our sustainability commitments in 2012	Develop new Sustainability Commitments for beyond 2012	Agreed a formal review of Our Sustainability Commitments Please visit: <a href="#">Sustainability Commitments</a>
Biodiversity	Demonstrate our commitment to the protection of ecosystems and habitats surrounding our landholdings	Implemented Biodiversity Action Plans for each of our landholdings around our nuclear stations  Developed targets to ensure we have the Wildlife Trust's Biodiversity Benchmark for all of our landholdings around our nuclear stations by 2015
Sustainability Commitments performance	Develop actions plans to enhance performance and mitigate risks	New balance sheet developed and revised index for reporting developed  Commitments now more closely aligned to company and business unit risk registers, and risk added as a standard agenda item in governance meetings
Embed sustainability in day-to-day processes and procedures	Engagement of our employees to take action to be more sustainable in their roles and ensure they have the sustainability knowledge to help customers become more sustainable	Delivery of sustainability training for all employees ("Sustainable Steps" online e-learning launched)  Developed new Sustainability Ambassador programme

Skills	Review the skills needed to support a sustainable future and ensure we have the appropriate expertise to support our nuclear new build plans	Developed a skills strategy which includes investment in an energy skills centre in the Somerset area
Sustainability policy	Align our sustainability policy with our new policy framework	Development and implementation of a new sustainability policy for our integrated business
Nuclear education	Ensure employees and stakeholders understand the role of nuclear generation in a low-carbon economy	Development of a new online education portal "Energy Future" which will be launched in 2011

## Working with our stakeholders

We want to be recognised as a leading and respected point of reference on energy policy.

We work with various organisations in order to understand our stakeholders' views on sustainability, climate change, security of supply, energy affordability and other key issues. We take their views into account when we plan our business activities. This helps us identify the most material sustainability issues for our business. It also helps us demonstrate transparency, develop strategy and policy, and improve our operations, products and services.

We use an assessment process to help us identify the most relevant and significant (material) sustainability issues for our business and our stakeholders. This ensures we report on the issues that matter most. As part of this approach, we have worked closely with our key internal and external stakeholders to define our sustainability agenda and ensure that Our Sustainability Commitments tackle the most relevant issues. You can find out what some of our stakeholders told us about Our Sustainability Commitments. For more information please visit: [Our Sustainability Commitments](#)

In February 2010 our materiality review identified the following issues as key to our stakeholders:

- **Nuclear** – Delivering low-carbon nuclear responsibly
- **Climate change impacts** – Reducing carbon and waste
- **Energy security** – Helping our customers
- **Electricity markets** – Pricing and energy affordability
- **Electricity generation** – Reducing carbon and waste/ Delivering low-carbon nuclear responsibly
- **Health and safety** – Serving our communities; and
- **Employment** – Building a world-class culture.

As many of Our Sustainability Commitments are due to be delivered in 2012, we have started a review of our sustainability strategy. This includes interviews and focus groups with our many stakeholders, including employees, to review what they believe will be material to EDF Energy and the wider energy industry into the future.

### Customers

We have a number of research programmes that engage with our customers at every level of product and service development.

Throughout 2010, we spoke to thousands of consumers in various research methods. This enabled us to deliver products and services that will best meet the needs of our customers. It included qualitative and quantitative studies, in person, online and over the phone and across all areas of the UK. The methods used largely depended on the objectives of the research. They included focus groups, in depth interviews, online surveys, 'mystery' shopping, telephone and face-to-face interviews.

Feedback from this is used in a variety of ways – for example in selecting product names that customers understand, or finding out which areas of sustainability our customers want to hear more about. Feedback has also been used in more detailed ways, such as developing products that meet consumer needs or improving our processes based on customer complaints.

We are currently trialling a number of electric vehicles, and have a comprehensive research programme attached to the project. We are also testing smart meters and have engaged with customers for a number of years about their needs from this new technology.

Energy suppliers have no specific legal requirements to support customers who are fuel poor, only obligations in relation to those who are elderly, disabled or long-term sick. We have continued to develop our work in this area and worked with many of our stakeholders to develop programmes such as Warm Zone, Safe Warm and Well and Home Heat Helpline. We also shared data with the Government to identify households that will benefit from energy rebates.

As described in Our Sustainability Commitments we have also worked with partners to promote the interests of poor and vulnerable customers, including at the policy-making level. For example, with charity partners. We have been calling for many years for a mandatory social tariff for the fuel poor. We are therefore delighted that the campaign has been successful and that the Government is committed to introducing a Social Price Support in 2011.

**Warm Zone**  
*To help vulnerable customers access the warmth they need, we set up Warm Zone back in 2001. Building on its initial success, the scheme has now been rolled out across 17 London boroughs. Warm Zone carries out door-to-door assessments to understand individuals' needs. Highly skilled assessors carry out these assessments. They also complete benefit health checks and provide practical advice about warmth and energy issues.*

**Safe, Warm and Well**  
*To make all our customers more aware of potential risks in the winter months and provide them, their families and their friends with advice about how to reduce risks, we run our 'Safe, Warm and Well' campaign every year. Spearheaded by television presenter Arlene Phillips, the campaign runs from November through to January, using radio features and interviews, press advertising, mailshots and direct marketing promotions to provide practical solutions. The campaign built on our strong relationship with the Womens Royal Voluntary Society, with many of their volunteers playing an important role as Safe, Warm and Well ambassadors, identifying those most at risk and providing practical assistance.*

### Financial

EDF Energy is a wholly owned subsidiary of EDF Group, which is part-listed on the Paris stock exchange. Our biggest lender (EDF Group) is represented on our Board, which meets quarterly. It is consulted on all significant environmental decisions and involved in our largest project approvals. We also work with EDF Group on the development of group policy. This has included developing a biomass policy.

### Political institutions and the regulator

We engage with political and regulatory stakeholders to help them understand our business better and to shape the policy environment in which we operate. We engage with MP's who represent constituencies within our communities or have an interest in energy policy, including climate change. We engage with an increasing number of civil servants from several different Government departments and also work closely with devolved bodies such as the Scottish Parliament, the Welsh Assembly, the Greater London Authority and local authorities. We focus on key events in Parliament, including debates, bills and select committees, and highlight specific environmental and social issues at these.

We have participated in a Business and Enterprise Select Committee investigating the operation of the energy markets and provided information to MPs regarding the Energy, Climate Change and Planning Acts. We also maintain a close working relationship with the industry regulatory body, Ofgem.

We have strong relationships with the Environment Agency and work with them on strategy as well as on an operational level through our power station teams and local inspectors.

We also work collaboratively with Government departments like DECC and DEFRA. Recent developments include our compliance with the Carbon Reduction Commitment.

### Media

The media plays a vital role in highlighting climate change and environmental issues. For more information on our media communications please visit: [Our Media Centre](#)

Against the backdrop of rising energy prices, the British Energy acquisition, and concerns around climate change, we assumed visible leadership positions in the media on key issues of energy policy and customer concerns. For the third year running we were finalists in the magazine PR Week's award scheme. Our media agency MPG MC won gold for the Green Britain Day 2009 campaign in the Media Idea over £1m category.

### Communities

We're using our status as a Sustainability Partner of the London 2012 Olympic and Paralympic Games to build our brand and connect with local communities. Through our partnership we aim to encourage people to reduce their carbon footprint during the run up to 2012. Our Green Britain Day and Team Green Britain are nationwide programmes working to help individuals and communities reduce their carbon footprint as part of this approach.

In addition our Helping Hands programme provides two days of company time for employees to volunteer with agencies/partners in their local communities. After discussion with our environmental stakeholders (such as Global Action Plan and the Eden Project) these opportunities are now more aligned to Our Sustainability Commitments.

We have developed our biodiversity plans working with the Wildlife Trusts and have been awarded the Wildlife Trust Biodiversity Benchmark at Sizewell B and Hartlepool power stations.

Through 2009 and 2010, Vincent de Rivaz, our Chief Executive, took on the official role as sustainability ambassador to HRH The Prince of Wales and led an inquiry into the leadership skills required for a sustainable economy.

We developed two of Our Sustainability Commitments specific to skills as a result.

- We will build external partnerships and physical centres of excellence to develop the current and future skills we need for a sustainable economy
- We will support the development within the UK of the skills necessary to sustain our nuclear businesses by working with schools, universities and other bodies.

As a company we have outlined our commitment to be open and transparent in our business dealings. As part of this commitment, we are working with local communities in the areas adjacent to the proposed new sites at Hinkley and Sizewell to understand the issues most important to them. This has included exploring locations for a 'light construction' skills training centre.

### Schools

We have worked with schools throughout the UK via our sustainable schools programme, the Pod. This provides environmental education and support to schools and children around the country. The Pod, an interactive website and teaching resource, is run in partnership with Eco-Schools, LOCOG and the Eden Project. This programme has registered over 11,000 schools and has achieved its commitment of engaging 2.5 million children by 2012, two years ahead of schedule.

The success of this programme has also been recognised from schools overseas with European schools now joining the programme. You can visit the Pod at: [Join the Pod](#)

### Suppliers and contractors

We have developed alliances and strategic partnerships with many of our key suppliers. We have developed a shared balanced scorecard to demonstrate the effectiveness of our partnerships and have regular meetings with our key contractors. Health and safety issues feature prominently in these discussions. We also work collaboratively with our suppliers to ensure they comply with the 10 principles of the UN Global Compact. This is ensuring a focus on ethical procurement.

### Employees

We have various forums to engage with our employees. These include regular team meetings, road shows, an intranet feedback forum, our company magazine, focus groups and cross-site meetings. Our annual employee engagement survey allows employees to provide feedback on a range of areas on a confidential basis. We use the results to develop action plans for improvement.

**Stakeholder Advisory Panel**

In 2006, we set up a Stakeholder Advisory Panel to allow our Chief Executive and Executive Team to discuss key strategic issues and the impact of these on EDF Energy with a range of expert independent advisors. We use their expertise, experience and intellect to challenge our Executive Team on our strategy and business approach, and to offer input into the development of our strategy.

The panel meets on a quarterly basis but we can access the knowledge of members as needed. The panel has never had any legal or fiduciary responsibilities and any actions proposed are subject to the normal governance process of the company.

The panel is comprised of five externally appointed members from a diverse range of backgrounds spanning commercial, political and not-for-profit disciplines. Panel members not only act in an advisory capacity but also act as advocates on the company's behalf. Current members of the panel are Will Hutton (Chair), John Roberts, Diane Coyle, Lord Patten of Barnes, and Simon Robertson.

The panel has often challenged the broad social and environmental policy framework in which we operate. In 2010, the panel actively participated in the development of Our Sustainability Commitments. Designed to improve the transparency of our operations, while setting challenging targets to improve the sustainability of business functions across energy generation and customer services.

The panel also recently advised us on issues related to our commitment to deliver new low carbon nuclear responsibly. This has addressed:

- How we should seek to engage stakeholder groups who have established concerns about nuclear
- How best to help inform the wider public about nuclear energy and safety
- How best to engage with Government on broad policy issues of key importance to the energy sector, such as electricity market reform

The four key strategic issues discussed by the panel throughout 2010, and how we addressed them, are outlined below:

DISCUSSION POINT	CHALLENGE	OUR ACTION
Climate and social commitments review	To review our commitments to reflect the changes in our company structure	Development, implementation and communication of newly revised Sustainability Commitments
Networks sale	To review and restate Our Sustainability Commitments post networks sale	Reviewed Our Sustainability Commitments post networks sale and removed those that were directly attributable to the networks business. Communication of these changes to our stakeholders through this report
Engage with Government on energy policy	How to engage with Government on broad issues of key importance to the energy sector such as electricity market reform	Dialogue with UK Government and regulator on energy market reform  Development of strategy and position papers for internal and external use
Engagement of stakeholders	Engage with a wide range of stakeholders who have voiced concerns about nuclear energy	Development of nuclear education website and newsletters on nuclear facts for launch in 2011



## Stakeholder Advisory Panel perspective

2010 was a challenging year for EDF Energy. I am very pleased the Stakeholder Advisory Panel was able to contribute to the company's strategy and development following the successful integration with British Energy and the sale of the Networks side of the business.

The 2010 Sustainability Performance Report is proof of the progress made in meeting the ambitious targets the company set out in the document 'Our Sustainability Commitments'. The panel played an integral part in helping the company to shape the commitments – successfully not just to meet them but to go beyond the original target.

For example, in 2010, the company's commitment to engage with 2.5 million schoolchildren through its sustainable schools programme, was met two years ahead of schedule. By the end of the year, 3.1m schoolchildren and over 11,000 schools were part of this successful initiative.

The Panel held three formal meetings with the EDF Energy Chief Executive, Vincent de Rivaz, and the senior management team during 2010, along with an ongoing dialogue throughout the year.

Topics for discussion covered a wide range of issues including new nuclear build, sustainability, the retail market, openness, and future strategy of the business.

2010 saw major changes in the political landscape with the first Coalition Government in over sixty years. The Conservative-Liberal Democrat Administration's support for new low carbon generation – including new nuclear build – was welcomed by EDF Energy. Supported by discussions with the panel, the company continued to engage effectively with the new Parliament on market reform throughout the remainder of 2010.

A major focus of panel discussions has been the company's relationship with its customers. The panel, therefore, encouraged and welcomed EDF Energy's decision to freeze prices over the winter of 2010/2011 – a decision that demonstrated a leadership position on pricing at a time of difficult market conditions.

I believe the company demonstrated a powerful commitment to open and transparent engagement on nuclear energy throughout 2010. This meant EDF Energy was well prepared to respond openly to events at the Fukushima power station in Japan in 2011. An open approach to communication, key to building trust relationships, is vital for a company that takes sustainability seriously. The panel will continue to encourage and press EDF Energy to maintain this open and transparent communication with its customers, employees and stakeholders at all times.

The panel looks forward to supporting the company in 2011 and beyond to develop further its ambition of being a leader in sustainability.

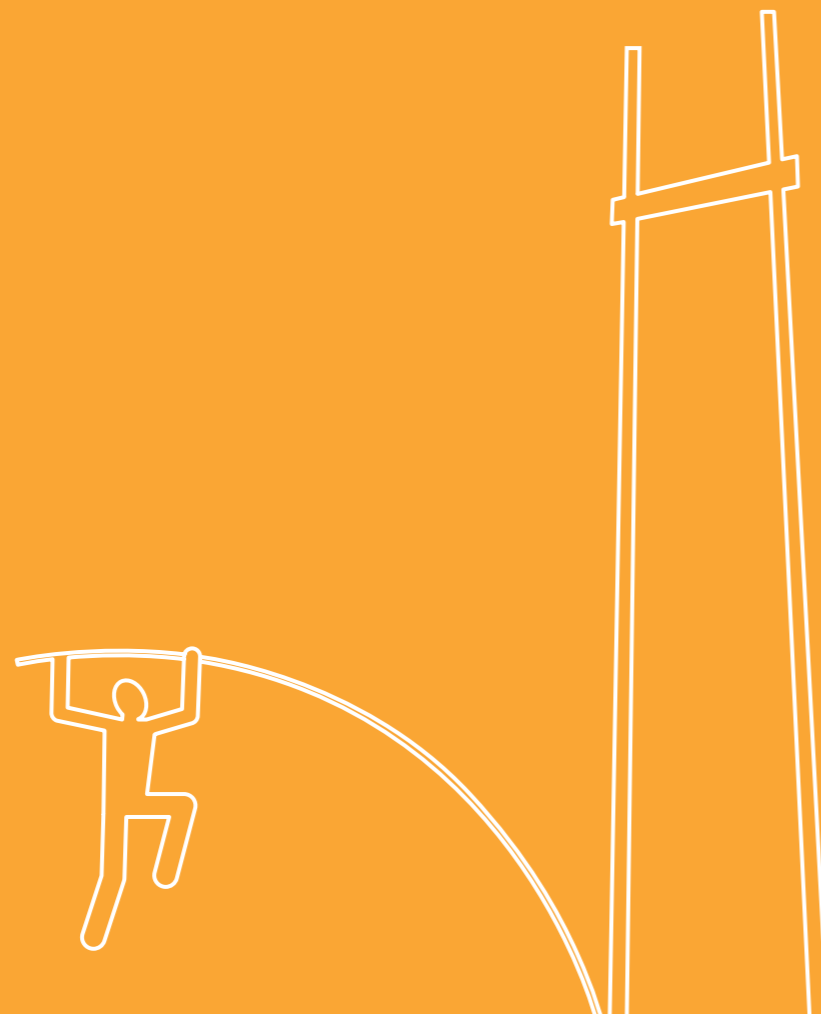
**Will Hutton**  
**Executive Vice Chair**  
The Work Foundation  
Chair, EDF Energy Stakeholder  
Advisory Panel



**Will Hutton** - Chair EDF Energy  
Stakeholder Advisory Panel

## Ambitions

It's imperative that our ambitions stretch our capabilities to the maximum. Being ambitious, to us, is about raising the bar so high, we have to excel to leap over it.



- Achieve zero harm
- Deliver financial performance
- Be first choice for customers
- Be a leader in sustainability
- Maintain high performing people
- Leader in nuclear power generation

### Business ambitions

Sustainability lies at the core of our Vision, Mission and Ambitions. It shapes the way we do business and is our strategy for the future.

### Our Vision:

**Leading the Energy Change**

### Our Mission:

**To bring affordable low carbon energy solutions home to everyone**

### Our Ambitions:

It means delivering a safe, socially responsible and competitive service that exceeds the expectations of our customers, our people, our shareholders and the communities in which we operate. We are among the UK's leading energy companies. We are also involved in many facets of the energy industry including generation and supply. This means we are very large and very diverse.

To guide our people, we have developed a set of shared values, operating principles and ambitions. At the heart of these lies a belief in the importance of striking the right balance in everything we do.

In practice, having a balanced approach means being open and pragmatic about who we are. We are a commercial organisation but we have responsibilities that go beyond making a profit. In fact, making a profit today allows us to invest in meeting our future responsibilities to the communities we serve and the environment we share.



- Achieve zero harm
- Deliver financial performance
- Be first choice for customers
- Be a leader in sustainability
- Maintain high performing people
- Leader in nuclear power generation

## Ambitions at a glance: How are we doing?

AMBITION	KEY PERFORMANCE INDICATOR	ACTUAL
<b>Zero harm safety</b>	Lost time injury rate	★
<b>Strong financial performance</b>	Profit EBITDA	●
	Free cash flow outflow	●
<b>First choice for customers*</b>	B2B and B2C customer satisfaction indices	◆
<b>Leader in sustainability</b>	Sustainability index	◆
<b>High-performing people</b>	High-performance index	★
<b>Lead the way in nuclear power generation</b>	Plant life extension	★
	Delivery of first European Pressure Reactor	◆

- ★ Well above target
- ◆ On or above target
- Below target
- Well below target

\* Networks Customer Satisfaction (CSAT) measure has been removed and its 5% weighting has been allocated to the B2B and B2C CSAT measure. Targets for HPI and sustainability index measures have been updated to reflect divestment of networks.

\*\* Targets for EBITDA and FCF updated to reflect sale of networks, Wylfa Land, and Bruce Power Claim

## 1. Achieve a zero harm record

We believe that all harm is preventable, so our aim is zero harm. That means providing workplaces that are safe for all and taking positive action to ensure the public aren't harmed by our operations.

We have a robust health and safety management system across our business and a clear governance framework in place to manage personal and process safety.

In 2010 there were 67 lost time incidents (LTIs) (41 less than 2009) and 149 Work Related Ill Health (WRIH) Incidents (4 less than 2009). We made significant progress in managing work-related musculoskeletal health risks, with no work-related cases in 2010. The main cause of WRIH is stress/mental ill health and this remains a key focus area for management intervention.

We have been proactive in our approach to employee wellbeing and evolved our corporate wellness programmes. We now have a comprehensive package of management training and internal communication campaigns as well as an online library of health, safety and employee wellness fact sheets. We have also re-launched our employee support programme, rolled out stress and resilience training and a change transition toolkit.

In the 2011 BITC Awards for Excellence Programme we were awarded a Big Tick for our approach to employee wellbeing and for the excellent progress we have made in building resilience within our workplace. We were also shortlisted as a national Example of Excellence.

- Achieve zero harm
- Deliver financial performance
- Be first choice for customers
- Be a leader in sustainability
- Maintain high performing people
- Leader in nuclear power generation

## 2. Deliver strong financial performance

We aim to deliver consistent, strong financial results for our stakeholders and for EDF Group.

For more details of how EDF Energy contributed to the financial results of EDF Group in 2010 please visit: [www.edf.com](http://www.edf.com)

Our business model must be profitable in the long-term if we are to make the huge investments necessary for the low-carbon future needed in the UK. Economic viability is therefore as important to us as environmental and social viability.

Our strategy centres on providing affordable, low-carbon energy, so the metrics we use must cut across both our commercial and our sustainability success.

You can find out more about our detailed financial performance in the **business performance overview** at the back of this report.



## 3. Be first choice for customers

We seek to provide an affordable, high quality service for our customers by getting things right first time, every time.

For our more vulnerable customers, including households that have difficulty in covering the cost of fuel, we have been proactive in developing our policies and extra services, and continue to work with the UK Government to tackle the root causes of fuel poverty. For more information please visit: **helping our customers case study**

As part of the Energy Retail Association, over the last few years we have worked with other energy companies to develop responsible business practices across a range of services (including billing, sales, and complaints management) to ensure all customers receive a seamless experience if they need to contact us. Customer privacy and identity protection is also a priority for us. Our related compliance framework includes policies and internal processes to ensure our employees are aware of how they need to manage customer data safely and securely. For more information on our responsible services please visit: **[Our Products and Services](#)**

We work closely with Consumer Focus, a leading consumer rights organisation. Consumer Focus has a duty to investigate cases where a customer has been disconnected, or is facing disconnection. It has powers to investigate cases on behalf of vulnerable customers. It also has a responsibility to analyse and monitor complaints statistics.

We have played an active role in industry-wide discussions about the management of customer complaints, working closely with other energy companies and stakeholders to ensure that processes are completed transparently and in our customers' best interests. We know that we do not always deliver what our customers may expect, but we are working very hard to understand and address this.

As part of our commitment to customer service, we have developed a new billing system which will deliver a more efficient service. It includes more options for customers to service their accounts online and is being rolled out from 2011.

- Achieve zero harm
- Deliver financial performance
- Be first choice for customers
- Be a leader in sustainability
- Maintain high performing people
- Leader in nuclear power generation

*"I congratulate EDF Energy on achieving Platinum Plus in the 2011 BITC Corporate Responsibility Index. It is a challenging time, but the results of this year's index demonstrate that companies are still focused on transforming their businesses to have a positive impact on society. All the companies who participated this year are at different stages in their responsible business journey, but they are all taking these issues seriously and are prepared to lead by example."*

**Stephen Howard,**  
Chief Executive,  
Business in the Community

## 4. Be a leader in sustainability

We are certain that sustainability must be at the heart of any energy company's long-term strategy. We want to lead the way in tackling the biggest environmental and social issues facing our industry and we've clearly defined our agenda through Our Sustainability Commitments.

Our Sustainability Commitments, launched in Parliament in 2010, set our long term sustainability agenda. They set out how we'll reduce carbon and waste, deliver low carbon nuclear responsibly, help customers, build a world class culture and serve our communities. You can find out more by visiting [Our Sustainability Commitments](#).

We were thrilled to have our efforts rewarded in the Business in The Community Corporate Responsibility Index where we were awarded Platinum Plus status for our approach to sustainability. With an overall score of 97%, we were also rated best in our sector. This is a great achievement considering the changes our company has undergone in the last 24 months. For more details please visit BITC [www.bitc.org.uk](http://www.bitc.org.uk)



*"We are absolutely delighted that EDF Energy has achieved the highest ranking of Platinum Plus. We've had an outstanding overall result at the BITC Awards this year in recognition of the great work being carried out by our people across our company. Sustainability is truly at the heart of EDF Energy as we aim to decarbonise Britain's energy infrastructure. Sustainability is not only about decarbonisation though. It encompasses much more. It is a societal, as well as an environmental, concept."*

*"This recognition comes a year after we have launched 'Our Sustainability Commitments'. We knew that in setting out these plans to change our business that we were setting ourselves challenging targets. But we also knew that our people would rise to the challenge, and the progress we're already starting to see in many areas would not be possible without them."*

**Vincent de Rivaz,**  
Chief Executive  
of EDF Energy

- Achieve zero harm
- Deliver financial performance
- Be first choice for customers
- Be a leader in sustainability
- Maintain high performing people
- Leader in nuclear power generation

## 5. Maintain a team of high performing people

Our ambition to maintain a team of high performing people means we invest in training, skills, diversity and inclusion.

We want our people to be involved in our business, to be an active part of EDF Energy and to feel a shared sense of ownership. We want everyone to play their part in shaping a low-carbon future and to feel they can be themselves at work.

We use our annual Employee Engagement Survey to give our people the opportunity to tell us how they feel and how we could do better. It is key in shaping our people agenda.

In our 2010 survey, 76% of our employees agree that they are clear in what they need to do in their job to meet Our Sustainability Commitments and 89% of employees agree we are an environmentally aware company. These results are very encouraging and in line with our commitment to ensure 100% of our employees know how they can help deliver our sustainability strategy. We will continue to develop our engagement programmes in 2011.

We want our people to achieve great things, so we invest in a range of training, development and support programmes. Throughout 2010 we rolled out 'Our Compelling Story' and around 14,500 of our employees have now attended this programme. This was developed after our employees told us in our 2009 Employee Engagement Survey that we needed to be clearer on how we communicate our direction as a company. The session is an engaging and interactive workshop, bringing to life our business and the context within which we operate. Our Executive Team also experienced 'Our Compelling Story' workshop in February 2010.

The workshop provides a mechanism for employees to discuss topics such as:

- What type of company are we?
- Where are we going?
- What are the key milestones along the way?
- What challenges do we face?
- What part do we all play?

In 2010, we also launched an online interactive e-learning tool called 'Sustainable Steps'. This takes employees, and an increasing number of contractors, through our sustainability journey. It explains what sustainability means to us and why it's key for our business, our people, our customers and the world we live in. It explores our approach to community investment and, importantly how our people can get involved. Over 5,000 employees have now accessed this training.

## 6. Lead the way in nuclear power generation

We believe nuclear power has a vital role to play in helping to address climate change and in ensuring secure, reliable and affordable energy supplies for the future.

Our parent company, EDF Group, has unique experience in building and running nuclear power stations as the world's largest nuclear power generator. For more information about our parent company please visit: [www.edf.com](http://www.edf.com)

In 2010, we continued to integrate the former British Energy into our business. This will ensure that nuclear generation is at the heart of our strategy and means we are better able to deliver a low-carbon future for the UK. You can find out more in the nuclear section of this report.



Hinkley Point

## Our Sustainability Commitments

We've launched a high profile set of 15 Sustainability Commitments – one of the biggest programmes of environmental and social commitments in our sector.

We'll report on our progress each year and keep our commitments under review to ensure they continue to address the most material issues for our business and our customers.



Reducing carbon and waste  
Delivering low-carbon responsibly  
Helping our customers  
Building a world-class culture  
Serving our communities

### Our Sustainability Commitments

Since launching Our Sustainability Commitments in Parliament in June 2010, we have made significant progress, but there's more to do. Some of our highlights from 2010 are listed below - there's more detail in the sections that follow.

### EDF Group Operational Excellence Awards

The Operational Excellence programme was launched in 2008 to support EDF Group's aim to be the leader in its industry. The programme's scope covers all perennial and transformation activities in France and internationally. In 2010, two EDF Energy projects won awards in the scheme. These were Our Sustainability Commitments and the Orchard project, our new billing system which will allow customers more flexibility and online account services.



### Life extensions to our nuclear generation power stations

We made the decision to extend the life of our Hartlepool and Heysham 1 power stations by at least five years, from 2014 to 2019. This will enable us to generate more low carbon energy to meet the UK's needs.



Hartlepool power station

Reducing carbon and waste  
Delivering low-carbon responsibly  
Helping our customers  
Building a world-class culture  
Serving our communities

## The Pod, our sustainable schools programme

Launched in September 2008, the Pod provides free resources to schools and young people, helping them tackle climate change and a wide range of other environmental issues. Over 11,000 schools and over 3 million young people have now taken part in the programme.



## More pledged to enable thousands of households to escape debt

The EDF Energy Trust Fund gave over £4 million<sup>3</sup> in 2010. This is significantly more than the £1.5 million a year originally pledged. The fund has now helped 20,000 households since 2003.



## Engaging our employees in sustainability

We developed a unique online sustainability training programme called Sustainable Steps which is being delivered to all employees. Over 5000 of our people have already taken part.



## Winter price freeze

When all of our major competitors were increasing their prices in Winter 2010, we were the only major supplier to freeze our prices until spring through a Winter Price Freeze for our residential customers.



<sup>3</sup>This includes monetary spend for Q1 and Q2 2011.



Reducing carbon and waste  
Delivering low-carbon responsibly  
Helping our customers  
Building a world-class culture  
Serving our communities

## Our Sustainability Commitments Performance at a glance

AREA	COMMITMENT	UNIT	2006 BASELINE*	2010 ACTUAL	STATUS
<b>Reducing our carbon and waste</b>	We will reduce the intensity of CO <sub>2</sub> emissions from electricity production by 60% by 2020.	t/GWh, project status	813 milestones met	218 & New Nuclear Build project on track	◆
	We will cut CO <sub>2</sub> emissions from our commercial buildings by 30% by 2012.	t/FTE	2.09	1.69	●
	We will cut CO <sub>2</sub> emissions from our transport by 20% by 2012.	t/FTE	2.32	1.46	★
	We will reduce the volume of waste from energy billing by 30% by 2020.	t	413.4	416.1	■
	We will send no office or depot waste to landfill by 2020.	%	61.3	13.4	★
<b>Developing low-carbon nuclear responsibly</b>	We will be open and transparent in our nuclear businesses and demonstrate we can be trusted to act to the highest professional standards in relation to nuclear security issues.	project status	milestones met	project on track	◆
	We will support the development within the UK of the skills necessary to sustain our nuclear businesses by working with schools, universities and other bodies.	project status	milestones met	project on track	◆
	We will work with Government, NGOs and others to demonstrate real progress towards implementing a long term UK radioactive waste solution.	project status	milestones met	project on track	◆

AREA	COMMITMENT	UNIT	2006 BASELINE*	2010 ACTUAL	STATUS
<b>Building a world-class culture</b>	By 2012, 100% of our employees will understand how they can help achieve Our Sustainability Commitments and will be participating in Team Green Britain	%	n/a	76	●
	By 2012, we will have attained gold standard from independent experts for our approach to diversity and inclusion.	project status	project status	project slightly behind	●
	We will build external partnerships and physical centres of excellence to develop the current and future skills we need for a sustainable economy.	project status	milestones met	project on track	◆
<b>Helping our customers</b>	We will reduce the proportion of CO <sub>2</sub> arising from our customers energy consumption by 15% by 2020	Mt	n/a	0.63	●
	We will commit to keeping our prices competitive and will provide enduring support for our most vulnerable supply customers until 2012.	number customer accounts (social tariff)	n/a	165.1	★
<b>Serving our communities</b>	By 2012, 2.5 million young people in the UK will have participated in our Sustainable Schools Programme, learning about the sustainable use of energy.	million children	n/a	3.12	★
	We will work with all our suppliers to ensure they meet the 10 principles of the Global Compact to guarantee an ethical supply chain.	project status	n/a	project slightly behind	●

- ★ Well above target
- ◆ On or above target
- Below target
- Well below target

\*Our 2006 baselines are original and unadjusted.

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## In detail: Reducing carbon and waste

### 1. We will reduce the intensity of CO<sub>2</sub> emissions from electricity production by 60% by 2020.

#### This commitment is on target.

The acquisition and integration of British Energy has provided us with the platform to deliver a low-carbon future. Our carbon intensity from electricity generation has reduced from 813g per kilowatt hour (kWh) in 2006 to 218g/ kWh in 2010. Our nuclear fleet generated 48.3 terrawatt hour (TWh) – enough electricity to power 39% of the demand from UK households. This important milestone not only gave us access to the UK's current nuclear electricity generation capacity, but it also paves the way for the construction of new, modern nuclear reactors at our existing sites.

Programmes in place to support the delivery of this commitment include:

#### Life extensions to our nuclear generation power stations

Extensive activity has taken place to ensure operational safety and excellence at our nuclear power stations. Investment in technical plant management is ongoing.

In 2010, we made the decision to extend the life of our Hartlepool and Heysham 1 power stations by at least five years, from 2014 to 2019, supported by additional investment.

**Investment in new nuclear power generation capacity**  
Security of supply, climate change and affordability are the three energy challenges facing the UK today. We believe that nuclear power is the most affordable low-carbon option to address these challenges as part of a diverse energy mix, and that new capacity can be built in the UK without subsidy.

We plan to build four new reactors – two at Hinkley and two at Sizewell. These will deliver low-carbon electricity safely and reliably. For more details of our current plan please visit the **nuclear section** of this report.

### Investment in Combined Cycle Gas Turbine (CCGT) technology which will be operational in 2012

The construction of our new 3-unit 1,300 Megawatt (MW) CCGT power station adjacent to the existing West Burton coal-fired power station continues as planned and will be operational in early 2012. Serving 1.5 million homes over its 25 year life, it will contribute towards our 2020 ambition to reduce the intensity of our carbon emissions by 60%.

The civil and building works are nearly complete, with the installation of mechanical and electrical equipment over 75% complete. Safe and efficient working remains the primary focus of the project team and workforce.

### Investment of £30 million in modifications to coal power stations

We completed our five year modification programme at the end of 2010 resulting in lower emissions from our coal power stations.

### 2. We will cut CO<sub>2</sub> emissions from our commercial buildings by 30% by 2012.

#### This commitment is behind target.

This commitment is behind target at 1.69tonnes (t)/full time equivalent (FTE). The current rolling year performance based on absolute emissions is 32.5kt compared to 24.1kt in 2006. Our CO<sub>2</sub> emissions have reduced in comparison to 2009. (Taking into account an adjustment for the extreme weather experienced throughout 2010 we are on track).

Programmes in place to support the delivery of this commitment include:

#### Energy surveys

Our B2B team has started a project to review energy surveys from our commercial buildings. This will identify areas for further improvement in energy management.

### BREEAM certification

The Building Research Establishment Environmental Assessment Method (BREEAM) standard sets best practice for sustainable buildings design and has become the leading environmental assessment method for reviewing the efficiency of buildings. In 2010, we successfully achieved certification for five of our sites.

**3. We will cut CO<sub>2</sub> emissions from our transport by 20% by 2012.**

**This commitment is on target.**

This commitment is on target at 1.46t/FTE. However based on absolute emissions we are behind target at 28.1 kilo tonnes (kt) compared to 26.7 kt in 2006.

Programmes in place to support delivery of this commitment include:

**Video-conferencing**

We have trained staff who travel frequently to use our video-conferencing facilities.

Through targeted messaging we actively promote video and tele-conference use ahead of the need to travel to a meeting, with the aim of reducing our transport emissions from business travel.

**Proactive travel management**

We have also developed our online intranet booking forms so business travellers now have to provide justification for travel and have this signed off by the appropriate manager. All travel outside of the UK has to be approved by a senior manager and in accordance with our travel policy.

This ensures we can challenge the need to travel and find opportunities to save time, money and carbon.

**Worksmart project**

Our worksmart project aims to reduce our non-operational travel costs within the company by a minimum of 20%. The project team are working to achieve this by increasing productivity and provide staff with a greater work-life balance while significantly contributing to the reduction of our transport CO<sub>2</sub> emissions.

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

**4. We will reduce the volume of waste from energy billing by 30% by 2020.**

**This commitment is behind target.**

This commitment will be delivered by our Orchard programme which aims to:

- Develop our billing process to allow customers to opt for online billing, reducing the need to send paper bills
- Allow customers to submit meter readings online, enabling them to better understand and manage their energy use. A number of other improvements will also ensure an easier experience for customers
- Transform the way we do business by providing online tools to allow our employees to offer more energy efficiency services, advice and products direct to customers. It will mean our staff can more directly help our customers to reduce their energy use.

This programme is slightly behind target as the migration of customer accounts has taken longer than planned. However once all customer accounts are migrated to the new system we will pro-actively promote online billing to our customers.

**5. We will send no office or depot waste to landfill by 2020.**

**This commitment is on target, and in 2010 we sent only 13.4% of our waste to landfill.**

**Employee engagement**

Our employees have a vital role to play in meeting this commitment. Our Sustainability Ambassadors have continued to act as champions at their respective sites to ensure that messages on how to dispose of waste correctly are proactively promoted. In partnership with Global Action Plan, we also provided training to employees on how to set up an Eco Team. The Eco Teams programme is designed to help individuals make improvements across a wide range of activities including waste. Eco Teams seek to change behaviour at the community level through education, training and support. The programme gives practical advice and ideas on how to cut waste, reduce environmental impact and save resources and money.



	2006	2007	2008	2009	2010
<b>Carbon dioxide from commercial buildings</b>					
tCO <sub>2</sub> /FTE	2.09	1.84	1.77	1.72	1.69
2010 target	1.67	1.67	1.67	1.67	1.67
2012 commitment	1.46	1.46	1.46	1.46	1.46
<b>Absolute Total Emissions</b>	<b>24.1</b>	<b>22.9</b>	<b>22.6</b>	<b>33.3</b>	<b>32.5</b>



	2006	2007	2008	2009	2010
<b>Carbon dioxide from transport</b>					
tCO <sub>2</sub> /FTE	2.32	2.20	2.04	1.59	1.46
2010 target	1.97	1.97	1.97	1.97	1.97
2012 commitment	1.86	1.86	1.86	1.86	1.86
<b>Absolute Total Emissions</b>	<b>26.7</b>	<b>27.3</b>	<b>25.9</b>	<b>30.7</b>	<b>28.1</b>

Unit of measurement amended to be t/FTE to take into account the changes in the size of our business. Absolute CO<sub>2</sub> emissions are also still tracked.

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## Case study: Reducing carbon and waste

We are in a unique position to lead the decarbonisation of the grid and enable people to use low-carbon energy efficiently.

### Specific Sustainability Commitments

#### Carbon and waste

- We will reduce the intensity of CO<sub>2</sub> emissions from electricity production by 60% by 2020.
- We will cut CO<sub>2</sub> emissions from our commercial buildings by 30% by 2012.
- We will cut CO<sub>2</sub> emissions from our transport by 20% by 2012.
- We will reduce the volume of waste from energy billing by 30% by 2020.
- We will send no office or depot waste to landfill by 2020.

#### Challenge

In 2006, UK CO<sub>2</sub> emissions totalled 546 megatonnes, of which we produced over 21 megatonnes. The 2050 target for the UK is to reduce emissions to just 118 megatonnes.

As the largest UK producer of low-carbon electricity we are in a unique position to help to decarbonise the grid, and to enable people to use low-carbon electricity efficiently at home and in industry.

We started to address this with our Climate Commitments in 2007. The Commitments have since grown, been backed up by our May Day Commitments and have evolved into Our Sustainability Commitments.

Our approach has been to innovate rather than imitate, challenging ourselves to have an impact in diverse areas including:

- Coal-fired power stations
- Offices, depots and transport
- Nuclear power stations
- Education
- Energy retail
- Customer energy use

#### Business case

Climate change is a very real challenge that we have a responsibility to urgently address. In addition, we know that our customers want affordable, reliable low-carbon energy, delivered by a supplier they can trust. Reducing waste and carbon also means we save resources, saves money and protects the environment. This make a compelling case for leadership.

### Investment

We have invested heavily in programmes to cut carbon and waste. This includes:

- Low carbon products and services like our Eco Manager
- Modification and improvements to our commercial buildings and power stations
- Sustainable Steps training for employees
- Employee bonus schemes linked to sustainability performance
- Supply chain management policies
- Green Britain Day and Team Green Britain

### Actions

We worked with NGOs, our Stakeholder Advisory Panel, our employees, our suppliers and many other stakeholders to discuss and share practices on how to reduce carbon and waste.

As a result we have taken steps to reduce carbon emissions in many key areas, including:

- Introducing improved turbines and heaters at our coal-fired power stations
- Taking proactive steps to make offices and depots more energy efficient, and targeting reduced transport emissions
- Undertaking a substantial rationalisation of our IT servers so they are less energy intensive.

We are aiming to embed climate change into the lives of every employee through:

- **Involvement:** Employees are invited to become Sustainability Ambassadors within their workplace/site/office
- **Collaboration:** Departments are brought together to focus their collective minds on the subject through panels
- **Reward:** Employees bonuses are linked to performance against our commitments
- **Celebration:** The best examples of employees' efforts to reduce emissions are recognised in our Sustainability Awards and are communicated proactively through our dedicated intranet platform, Myplace
- **Governance:** All proposed projects are reviewed against our dedicated Ambitions Impact Appraisal tool which measures the positive and negative impacts of all projects on our Ambitions, including our Ambition to be a leader in sustainability.

### Results

We have completed a five year, £30 million investment to make modifications to our coal-fired power stations which are our single largest source of emissions. Even relatively small percentage emission reductions can make a substantial impact here.

An improvement at our Cottam coal fired station is the High Pressure Heaters project. Each unit at Cottam has a set of heaters comprising of four large heat exchangers (tube and shell). Their role is to improve the efficiency of a power station by approximately 1.25% (equivalent to a heat increase of 3.4%). The purpose of this overhaul replacement programme is to maintain the efficiency derived from reheating the water before entering the boiler at the power station. Operating at full capacity, the HP heaters renovation should ensure that the heaters to provide an efficiency gain of around 1.25%, (equivalent to a heat increase of 3.4%)

Current year figures show we have reduced emissions from commercial buildings by 19% against the 2006 baseline (0.4 tonnes/FTE) when normalised by employee numbers.

We have reduced emissions from transport by 37% in the last four years. This has been achieved through proactive transport programmes including the recording of odometer readings, travel management plans with our travel agent, and engaging our employees to use video and tele conference facilities instead of the need to travel.

The reactor life extension project at our nuclear stations has avoided around 90 million tonnes CO<sub>2</sub> to date.

The centralised IT server rationalisation programme is expected to deliver CO<sub>2</sub> savings of 829 tonnes per year.

As a result of our efforts to drive performance and engage our employees 89% of our people believe EDF Energy is an environmentally responsible company.



- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## In detail: Developing low carbon nuclear energy responsibly

**1. We will work with Government, NGOs and others to demonstrate real progress towards implementing a long-term UK radioactive waste solution.**

**This commitment is on track. We measure progress on this in a number of ways including reporting annually on:**

- Progress we have made to obtain “letters of compliance” from the Radioactive Waste Management Directorate. The aim of the Letter of Compliance (LoC) disposability assessment process is to assist nuclear sites in carrying out their clean-up and hazard reduction mission
- How we have increased the availability of information on higher activity waste disposal by working in partnership with others
- Our contribution to identifying and funding research relating to the safe management and disposal of higher activity waste.

For further information please see the **nuclear facts** section within this report.

**2. We will be open and transparent in our nuclear businesses and demonstrate we can be trusted to act to the highest professional standards in relation to nuclear security issues.**

**This commitment is on track and here is how we are measuring our performance:**

- Each year we publish results from independent polling, carried out to measure how effectively we communicate with communities around our power stations. Polling is being undertaken in August 2011 and we will communicate the results in our 2011 Annual Sustainability Performance Report.
- In addition we circulate and publish online monthly newsletters for the communities around our nuclear landholdings. These set out the work we have undertaken in each of our local communities and also outline our progress on work programmes.

**3. We will support the development within the UK of the skills necessary to sustain our nuclear businesses by working with schools, universities and other bodies.**

**This commitment is on track.**

By 2015 we will:

- Have expanded our apprenticeship training programme to cover a wide range of disciplines. (This is out of scope for 2010.)
- Have provided opportunities for at least 100 students per year to spend time with EDF Energy as part of their education.

We took on 59 student placements in 2010 which is more than our target to offer 40 student placements.

We have increased the availability of energy-related technical courses in the UK to at least 150 places per year by working with nuclear skills academies and colleges.

Our nuclear graduate scheme is also making a major contribution selecting and developing the leading engineering talent of the future. The annual intake of graduates increased from 15 students to over 50 in 2009 and we recruited a further 87 in 2010.

We also have many active STEM (science, technology, engineering and maths) ambassadors who work with local schools to encourage young people to study STEM subjects. We are also the principle sponsor of the Cheltenham Science Festival and the Generation Science programme in Scotland. These encourage more people to consider a career in our industry.

In 2010 we attended three National Skills events to raise our profile in the skills development field. We also established a detailed skills plan with support from each of our business units and through the National Skills Forum.

## Case study: Delivering low-carbon responsibly

We have continued to demonstrate our commitment to transparency on nuclear, going beyond the requirements of our operating licence.

### Specific Sustainability Commitment

We will be open and transparent in our nuclear businesses and demonstrate we can be trusted to act to the highest professional standards in relation to nuclear safety issues.

### Challenge

Our stakeholders need to feel they can trust us in the key areas of safety and security and they want to know more about our long term plans for waste. We understand the need for transparency and reassurance and the very positive role that effective communication can play.

### Business case

For many years it has been a condition of the operational licence – without which the stations cannot operate – that regular open meetings are held with representatives from local communities. These meetings are independently chaired and open to the public.

Since we acquired British Energy, we have been determined to ensure that openness and transparency are the cornerstones of our operating philosophy at each of our nuclear stations. We believe this is vital in order to build trust and develop the understanding that is necessary to drive responsible low-carbon investment for the future.

## Challenges

## Ambitions

## Commitments

## Nuclear

## Assurance

## Definitions

Reducing carbon and waste  
→ Delivering low-carbon responsibly  
Helping our customers  
Building a world-class culture  
Serving our communities

### Investment

We have invested in the development of community newsletters, community liaison officers, and an annual survey which is distributed to the people around our stations to measure how effectively we communicate. Future investment to engage, inspire and educate the public will see the opening of new visitor centres at Hinkley C and Sizewell C new build sites. The first is due to open in 2013 with the aim of achieving 75,000 visits by the time our first new station opens.

We are also investing in the development of an online visitor centre to reach out to young people and those living away from nuclear sites.

### Stakeholder engagement

The essence of the commitment is to be open and transparent with our stakeholders and, as such, this will ensure all stakeholders are aware of and have a say in our development plans.

### Action

The minutes of our regular community meetings are posted in local council offices and libraries. Every month our stations send a newsletter to the community that details the recent operating performance of the stations, any events or incidents that may have happened at the site, and details of recent community initiatives or projects. The newsletters are also posted on our website so they are available to anyone.

We host visitors from schools, colleges and other interested parties to our sites on a regular basis, so they can see for themselves how we operate and maintain our stations. This includes more than just an operations focus. For example we are responsible for maintaining the wildlife and countryside around our sites – much of which is of national importance and are designated as Sites of Special Scientific Interest.

We are continuing to develop and improve our communications and will be adding more and more information to our website with real-time generation information and details on planned and unplanned outages. We will also be launching a new information programme in 2011 that considers and discusses the pros and cons associated with the issues around electricity generation.

There is a community liaison officer at each power station, acting as a strong link between the company and the local community to ensure our communities are kept informed of our plans.

### Results

The regular community meetings and newsletters are well received and help build solid relationships between the community and the operational sites. Richard Smith, Chairman, Sizewell A & B Stakeholder Group, commented recently, "As Stakeholder Group Chairman I have always attached the highest importance to having an excellent relationship with the B Station Director."

"My questions are always answered fully (and in non-technical language which I can understand) and our regular meetings provide an up-to-the-minute briefing about site activities and give me the chance to press points, sometimes less palatable, expressing community concerns and interests."

We will continue to listen to our many stakeholders and act upon feedback in a clear and transparent way.



EDF Energy powering the London Eye with low carbon electricity

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## In detail: Helping our customers

**Utility Industry Award**  
We won community initiative of the year at the Utility Industry Achievement Awards for our partnership with Plymouth Citizens Advice Bureau. These prestigious awards recognise outstanding achievements in the industry.

**1. We will reduce the proportion of CO<sub>2</sub> arising from our customers' energy consumption by 15% by 2020.**

**This commitment is behind target.**

There are seven metrics that we use to measure this commitment:

- Carbon Energy Reduction Target (CERT),
- smart metering
- micro generation
- climate balance product
- team energy pledges
- read and reduce
- our green fund

Each of these initiatives help deliver carbon savings for customers. Our CERT programme contributed the majority of these savings in 2010 accounting for about 90% of the savings.

**2. We will commit to keeping our prices competitive and will provide enduring support for our most vulnerable supply customers.**

**This commitment is on target.**

The main way we measure progress here is by the number of customers on our energy assist discounted tariff – with 165,102 customers, we are on target.

In addition, we continued to make significant donations to the EDF Energy Trust Fund, of over £4 million<sup>4</sup> in 2010, significantly more than the £1.5 million a year originally pledged. The Trust has now helped 20,000 households since 2003 make a fresh start, free from debt.

We also worked alongside the UK Government and other energy suppliers to develop a ground-breaking project to provide each of our 26,000 very vulnerable customers with an £80 electricity rebate. In 2011 we will be working on a larger project as part of the Government's proposed energy supplier obligation to offer financial support to our most vulnerable customers. Across all suppliers we expect this to cost £250 million from 2011, rising to £310 million by 2014/15.

In order to support our wider customer base, in November 2010 we announced our Winter Price Freeze Guarantee. This pledged that we would keep our standard gas and electricity prices stable through the winter months. We were the only major supplier to do this and it meant our customers benefitted from stable and competitive energy prices during a cold winter.



<sup>4</sup>Includes financial spend for Q1 and Q2 2011.

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## Case study: Helping our customers

In 2010 we continued to help our vulnerable customers in a variety of ways.

### Specific Sustainability Commitment

We will commit to keeping our prices competitive and will provide enduring support for our most vulnerable supply customers until 2012.

### Challenge

In Our Sustainability Commitments, we committed to a range of measures to support customers struggling to meet energy costs, but we were challenged by the fact that customers did not always trust that the support offered from an energy company was genuinely provided for their benefit. Those customers who were hardest to reach were often those in greatest need.

In December 2007, we consulted our stakeholders at a special fuel poverty event. We asked for views on how we should best get help to our most vulnerable customers. The overwhelming advice we received was to work with 'trusted intermediaries', third party agencies and charities who work with vulnerable customers and have already gained their trust.

As an energy supplier with a large presence in the South West of England, we already had a good working relationship with Plymouth Citizen's Advice Bureau (CAB). This is an independent charity forming part of the Citizen's Advice network of 416 facilities. It offers independent face-to-face and telephone advice. We often worked together on supporting customers with energy debt we knew that customers who were reluctant to talk to us often turned to them for advice with all aspects of household debt.

Together, we decided to develop a project to reach the most vulnerable energy consumers throughout Devon and Cornwall. This region is particularly affected by fuel poverty due to the high numbers of properties that are hard to insulate and are not on the gas network. Consumers here often rely on much more expensive fuels, and are already struggling due to the region's typically low wages.

### Business case

- **Economic:** Providing support through advisors to avoid or address energy debt allows us to avoid consumers getting into debt in the first place and also reduces the impact on our business of debts we may never recover.
- **Environmental:** Encouragement to take up our free or subsidised insulation offers under the Carbon Emissions Reduction Target supplier obligation, and encourages energy saving behaviour which will help us meet our Our Sustainability Commitment to reduce the CO<sub>2</sub> arising from our customers' energy consumption.
- **Social:** Allowing us to deliver our commitment to support our most vulnerable customers and recognising corporate social responsibility as an energy provider.

### Investment

The project was developed in two phases. In 2008, we agreed to second a customer service centre manager to Plymouth CAB for six months to develop their telephone service, so that they could assist more customers in debt, and to free up their advisors for more energy debt and fuel poverty advice work. Our seconded employee developed the service and recruited volunteers to staff the telephone service.

In the second phase, we sponsored an Energy Advice Development Worker for two years from January 2009. Their role was to train debt and welfare staff throughout Devon and Cornwall on energy debt or fuel poverty, and offer advisors ongoing support, briefings and advice to allow them to support their clients. This allowed us to share training and expertise throughout a region which is hard hit by fuel poverty, has numerous hard to reach groups, and often misses out on training opportunities. The project has been such a success that we have now agreed to continue for a further year throughout 2011.

### Stakeholder engagement

We have been able to demonstrate our genuine support for our most vulnerable customers and to deliver the best advice through an official body that consumers view as being a trusted centre for advice. This was highlighted in the media coverage surrounding one of the events organised in November 2009 by the project, the South West's first Fuel Poverty Conference. This included participation from Government Minister David Kidney, the chair of the Government's Fuel Poverty Advisory Group, Derek Lickorish, and other key stakeholders.

### Results

For the first phase, call handling by the bureau increased significantly. Some 26 volunteers were recruited, representing a salary value to the bureau of £250,000, but crucially allowing an estimated 2,000 more clients to receive support every year.

In the second phase, we set clear delivery targets for the Energy Advice Development Worker to deliver training and support. The worker exceeded these targets and it is estimated that 10,000 people a year in the region will now be reached with better information and advice about managing their energy bills, and dealing with debt\*. This means that those households are enabled to keep warm and avoid the anxiety and misery of debt.

The impact of this project was also recognised in December 2010 when it won the Utility Industry Achievement Award for Community Initiative of the Year.



\*Calculation based on the number of advisers trained and the number of clients they saw after this.



- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## In detail: Building a world-class culture

### 1. By 2012, 100% of our employees will understand how they can help achieve Our Sustainability Commitments and will be participating in Team Green Britain.

#### This commitment is behind target.

We have a range of programmes and projects to help our staff understand Our Sustainability Commitments and to allow them to play an active role in shaping a low-carbon future.

The results of our Employee Engagement survey show that 76% of our employees agree they know how they can play a part in the delivery of Our Sustainability Commitments. This is an increase of 5% since 2009.

In addition, 67% of our employees believe we compare favourably to other companies around sustainability, which is an increase of 15% since 2009.

We know there is much more to do in order to fully deliver this commitment though, so we are using a wide range of projects to get all of our people involved.

For example, our Team Green Britain campaign aims to get members working together to reduce their environmental impact before the London 2012 Olympic and Paralympic Games. In addition, 2010 saw the company's 'Compelling Story' rolled out to all employees. This gave them the opportunity to see how our business has been formed and to explore our vision for the future.

We also launched Sustainable Steps, an engaging and interactive e-learning tool that teaches employees about sustainability issues and Our Sustainability Commitments. Sustainable Steps also features an evaluation section which allows employees to provide feedback on our sustainability work and tell us whether the training helped them. Hundreds of our employees have provided feedback and we will continue to use this to evolve our employee engagement strategy.

### 2. By 2012, we will have attained gold standard from independent experts for our approach to diversity and inclusion.

#### This commitment is behind target.

Delivery of this commitment is based on meeting criteria of the Diversity Works for London benchmark.

To achieve this, we have developed a diversity action plan which includes: employee monitoring, awareness programmes, talent reviews, benchmarking, targeted recruitment and specific governance plans.

We have placed increased emphasis on awareness of our approach to diversity and inclusion across the business. This included development of 'A Culture of Inclusion' training which we piloted in 2010. In-house trainers are now in place and will roll this out throughout 2011. This training will provide details of our approach to diversity and inclusion across our business.

We also used Diversity Day to build awareness and set up a dedicated intranet site to provide information on diversity and inclusion to staff. This saw significant increases in use in 2010. Each business unit has created action groups and is looking at diversity and inclusion for their respective areas.

Our employee diversity networks have also started to gather momentum. For example:

- Our Women's Network held an International Women's Day conference
- Our Black, Asian and Ethnic Minority Network saw membership increase
- Our Lesbian, Gay and Bisexual Network took part in Pride celebrations across the country
- We also established a Disabilities and Carers Network in late 2010.

### 3. We will build external partnerships and physical centres of excellence to develop the current and future skills we need for a sustainable economy.

#### This commitment is on track.

We are committed to provide opportunities to engage, inspire and educate the public through new visitor centres at our Hinkley C and Sizewell C new build sites. The first is planned to open by 2013 and achieve 75,000 visits by the time our first new station opens.

As part of our nuclear engagement programme, we carried out early design work for our proposed visitor centres. Work progressed well and plans for our Hinkley visitor centre have now been drawn up and included in the planning application for the site.

We also plan to reach out to young people and those living away from our nuclear sites through an online visitor centre. This will aim to engage and educate potential employees, customers and stakeholders in an easily accessible manner. We plan to launch this in 2011. The site will include a wide range of information on nuclear power and how we operate our nuclear stations.

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## Case study: Building a world-class culture

Taking the steps required to be a leader in sustainability means taking our ambitions out of the boardroom and into the offices of our colleagues throughout the entire business.

### Specific Sustainability Commitment

By 2012, 100% of our employees will understand how they can achieve Our Sustainability Commitments and will be participating in Team Green Britain.

### Challenge

One of our core ambitions is to be a leader in sustainability. We believe that this requires us to embed sustainability within everything we do. Sustainable Steps (our interactive e-learning tool for staff) is the first stage of this journey and a really important tool to help our people understand what sustainability means for them and for the business.

### Business case

Using an e-learning tool provides us with an interesting and engaging way to get the sustainability message across to all our people. As it is an online format, people can complete the tool at their desks at a time that suits them. We are also able to continuously update the content to keep it current. We'd like Sustainable Steps to be the place to go for information on all things relating to sustainability.

### Actions

Sustainable Steps provides pragmatic guidance on how our people can support Our Sustainability Commitments and gives them confidence to talk about the role of nuclear energy in a low-carbon future. It looks at how we're reducing our carbon emissions and waste, and sets the context for our belief that nuclear energy is a responsible choice for our customers and the planet.

### Results

Over 6,000 employees have accessed the training, of which around 5,000 have completed the related quiz – around a third of all our employees. All new starters will complete the tool as part of their induction and we plan to roll the training out to the whole of the business by the end of 2011.

Since the launch of the tool towards the end of 2010, we have received over 1,000 individual pieces of feedback on the system. Of those feeding back, 80% agree or strongly agree that 'Having taken Sustainable Steps, I feel more confident in talking about Our Sustainability Commitments and the role of nuclear energy'.



Reducing carbon and waste  
Delivering low-carbon responsibly  
Helping our customers  
Building a world-class culture  
→ Serving our communities

**Biodiversity Award**

Biodiversity is managed locally at our stations and several sites have been recognised for their approach to biodiversity.

Hartlepool Power Station was awarded the Wildlife Trust's Biodiversity Benchmark in October 2010. The award recognises our robust biodiversity management system as well as the Stations work to conserve and enhance the diverse wildlife of the site.

Sizewell B Power Station, which achieved the Biodiversity Benchmark in 2009, retained its certification following an annual surveillance audit by the local Wildlife Trust.

## In detail: Serving our communities

**1. By 2012, 2.5 million young people in the UK will have participated in our Sustainable Schools Programme, learning about the sustainable use of energy.**

**This commitment was met two years ahead of target.**

The Pod, our programme for greener schools, was launched in 2008, and has become an educational resource of choice for schools across the UK, and beyond.

The Pod is a free online resource for teachers and young people aimed at both primary and secondary school levels. It helps pupils learn about an environmental issue, take action to address it, and then inspire others to do the same by use of blogs, photos and video showing what pupils achieved.

Run in partnership with Eco-Schools, one of the largest environmental education projects in the world, the Pod helps young people understand and tackle issues such as energy, biodiversity, waste and transport. All of its teaching resources are endorsed by the Eden Project and the programme itself is part of the London 2012 educational 'Get Set' Network for schools.

The Pod runs three national green campaigns each year which are a great way of getting whole schools learning about sustainability.

One of the most recent campaigns was 'Switch Off Fortnight,' which took place between 22 November and 3 December. More than 3,500 schools used Pod resources to get the whole school focused on saving energy.

We are delighted to report that over 11,000 schools have registered with the programme from across the UK as well as a number of overseas schools.

The Pod, has now engaged with more than three million children, meeting our Sustainability Commitment target of engaging 2.5 million children by 2012 two years ahead of schedule. This is the first of our Sustainability Commitments to be met.

**2. We will work with all our suppliers to ensure they meet the 10 principles of the UN Global Compact to guarantee an ethical supply chain.**

**This commitment is behind target.**

In support of our commitment to positively engage with all of our suppliers using to the ten principles of the UN Global Compact, we have developed a category risk matrix that identifies supply chain risk in the areas of human rights (including labour standards), environment and anti-corruption. This is now embedded in our supplier registration process. Each supplier is assigned a risk score within each of these areas and a tailored questionnaire is compiled for completion by the supplier. The questionnaire enables us to assess any instances of non-compliance by the supplier which we can then follow up in a variety of ways. This can include providing information relating to the relevant principle area(s); engagement through supplier forums or, for our critical/strategic suppliers, dialogue within pre-planned supplier review meetings and subsequent action planning with our suppliers.

To date we have distributed 3,246 questionnaires, received 1,111 responses and confirmed 639 compliant suppliers. We are also working to integrate processes for suppliers working in partnership with our nuclear generation Business Unit (around 3,000 suppliers).

In addition to our UN Global Compact commitment, our procurement activities are governed by our Sustainable Procurement Policy. This promotes the consideration of social, economic and environmental factors in our procurement decisions. We also subscribe to Achilles, a system that we use to carry out annual audits of our prioritised suppliers across health and safety, environment and quality criteria.

**CommunityMark**

We have been awarded the CommunityMark from Business in the Community in recognition of our strategic approach to community investment. The CommunityMark recognises businesses that have brought positive changes in their local communities by investing and working with them. EDF Energy is one of 41 companies in the UK that have successfully received this award. For more detailed information on the CommunityMark please visit: [www.bitc.org.uk](http://www.bitc.org.uk)

- Reducing carbon and waste
- Delivering low-carbon responsibly
- Helping our customers
- Building a world-class culture
- Serving our communities

## Case study: Serving our communities

We rely on talented people to produce secure, affordable low-carbon energy, to help customers, and ensure a successful business. We invest heavily in skills development to achieve this.

### Specific Sustainability Commitment

We will build external partnerships and physical centres of excellence to develop the current and future skills we need for a sustainable economy.

### Challenge

A large number of those working in the nuclear sector are approaching retirement at the same time as a new generation of low-carbon nuclear generation is needed for the UK. A talent strategy was needed to help to plug this growing gap with skilled employees for the future.

A key challenge here was to earn, through open engagement, the trust and support of stakeholders in the local communities in which we operate. This was recognised as key in helping tackle the skills and talent gap in the sector – local jobs for local people would be a win/win outcome.

### Investment

Significant investment has already been pledged, and more will follow. Examples include:

- A new Energy Skills Centre at Bridgwater College, Somerset, costing £3m
- Another training centre and apprenticeship hub at West Somerset Community College (£1.6m)
- A construction training centre, enabling people with no prior construction experience to gain the skills required to secure jobs on new build construction projects (£1.5m).

### Stakeholder engagement

We have formalised our company-wide approach to talent development by creating a Skills Development Forum with representatives from across our business. As part of this, we have identified key audiences and messages along with a number of external organisations with whom we can work as part of partnership to support our long-term pipeline development plans.

In addition to the new training centres we are planning, schools also feature significantly in our skills and community engagement programmes. For example, we run a Sustainability Ambassador programme that includes a focus on STEM (science, technology, engineering and maths). We are now working to develop tools and training to further support STEM Ambassadors in their work.

Our focus on proactive recruitment from local communities and helping young people into the sector through apprenticeships is also core to our Skills Development Strategy. This helped our programme to win a Big Tick Award in the Business in the Community Awards for Excellence.

We want our apprentices to become highly, skilled long-term and loyal employees. In order to achieve this our four-year apprenticeship includes:

- A one-week induction and team-building process in the Lake District
- Two years at HMS Sultan, a Royal Navy training base in Portsmouth, learning engineering, maths, fault finding, electrical engineering, health and safety, communications, electrical engineering, as well as life skills
- Two years on a power station
- Opportunities to visit European countries to learn from others
- A formal qualification – a minimum of a Duke of Edinburgh bronze award

### Results

In 2010, we employed 89 apprentices and 87 new graduates. We also provided opportunities for 37 industrial placements to work with us for 12 months as part of their undergraduate studies.

Around 20,000 people will work on the planned nuclear power stations over the construction period; 900 additional permanent jobs will be created at Hinkley alone. During construction, around 5,000 jobs will be created.

These jobs, and the related income for local suppliers will massively support rural communities. For example, the power plants at Hinkley will see £100 million per year injected into the local economy during construction and £40 million per year during operation.

Some of the trained technicians needed for the operation of Hinkley Point C will come through the apprenticeship programme so we will be increasing the number of apprenticeships over the next few years.

Rupert Cox, Chief Executive of Somerset Chamber of Commerce, said: "Hinkley Point C is vital to local jobs and businesses, and will have a major economic benefit for the community."

In an ICM poll\* carried out in 2010 nearly four times as many local people support plans for a new power station at Hinkley Point than oppose it, and 85% of people living within approximately 25 miles of Hinkley Point say that the project is important to local jobs.

\*ICM interviewed a representative sample of 1,002 adults aged 18+ living in Sedgemoor, Taunton Deane and West Somerset. Fieldwork was carried out by telephone, between 24th and 28th September 2010, and data has been weighted to the profile of the population.

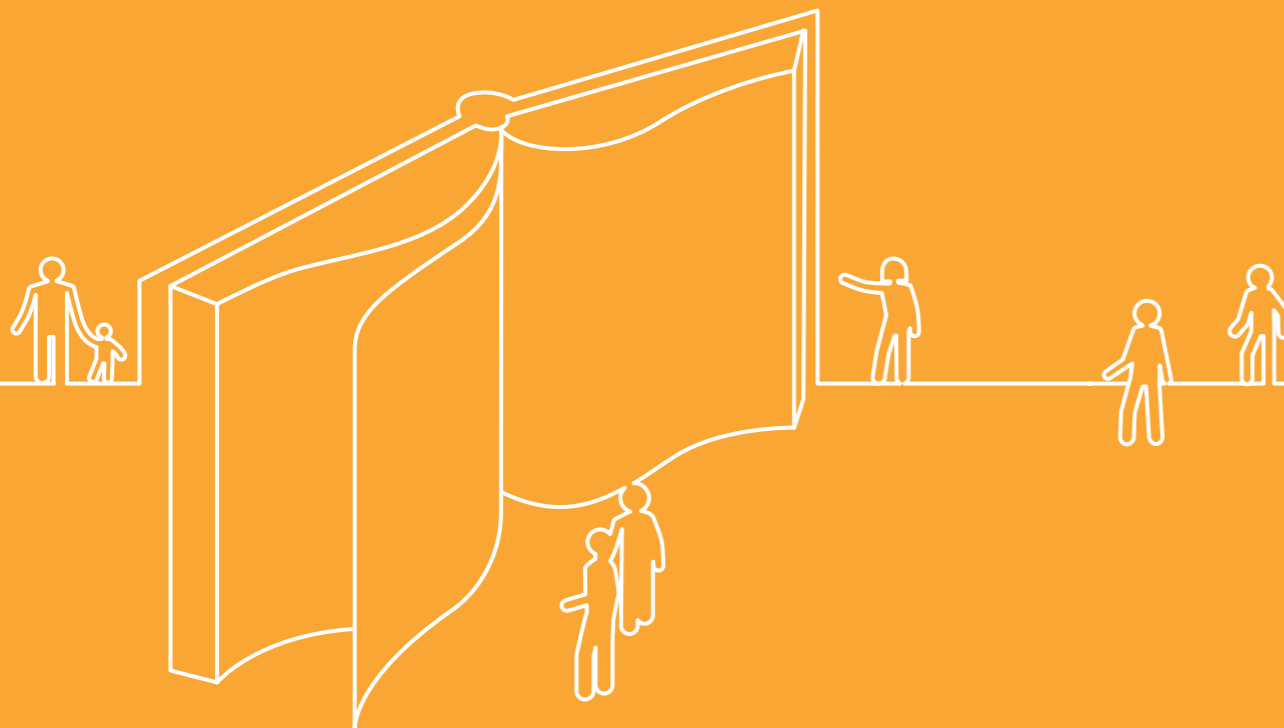


Bridgwater College

## Nuclear

We have always sought to make our nuclear policy and performance totally transparent. Here we present an update for all to see.

Although this is a 2010 report, we are very mindful of the human tragedy that occurred in Japan following the earthquake and tsunami in March 2011. Following these events our challenge is to continue to demonstrate our commitment to safety in everything we say and do. Openness and transparency have a key role to play here too.



## In detail: Our nuclear performance

Our stakeholders need to feel they can trust us in the key areas of safety and security, and want to know more about our long-term plans for waste.

In the UK, almost a third of carbon emissions come from power stations. According to the Committee on Climate Change, if the UK is to meet its target of reducing carbon emissions by 80% by 2050, investment must be focused on low-carbon power-generating technologies, so that the electricity generation sector is largely carbon-free by 2030. At EDF Energy, we are proud to be playing a key role when it comes to helping prevent climate change.

In 2010, our nuclear fleet generated 48.3TWh. This is enough electricity to power 39% of the demand from UK households. In total, our nuclear fleet helped avoid emissions of 29.5 MtCO<sub>2</sub> had the electricity been generated by the prevailing fossil fuel energy mix. To get the same benefit would be equivalent to removing 42% of UK passenger cars from British roads in 2009.

Our low-carbon nuclear power generation has long played an important role in helping the UK meet its emissions targets.

Over their complete lifetime our fleet of seven Advanced Gas-Cooled Reactor (AGR) nuclear stations will help avoid the emissions of over 1,000 million tonnes of carbon dioxide (MtCO<sub>2</sub>) that would have been emitted had the same output been generated by fossil fuel stations. Our most modern Pressurised Water Reactor (PWR) power station, Sizewell B, will alone help avoid emissions in excess of 200 MtCO<sub>2</sub> over its lifetime.

**The value of nuclear plant life extension**

Extending the life of our nuclear power generation stations makes good economic sense and keeps carbon emissions down now. Plant lifetime extensions to date have saved around 90MtCO<sub>2</sub> that would otherwise have been emitted by fossil fuel power generation.

At the end of 2010, we announced the successful life extension of Heysham 1 and Hartlepool to 2019. As a result of these life extensions so far, our fleet could deliver more than 500TWh of electricity and avoid more than 200MtCO<sub>2</sub> that would otherwise be emitted by fossil fuel generation.

At the same time, we announced we would extend the life of our other Advanced Gas-Cooled Reactors (AGR) by a further five years and our Pressurised Water Reactor (PWR) at Sizewell by 20 years. This will result in more than 300TWh more output, avoiding more than 100MtCO<sub>2</sub> that would be otherwise emitted by fossil fuel generation.

If all of the reductions above are achieved, this will save around 390MtCO<sub>2</sub>. To put this into context, to get the same benefit would require all UK passenger cars to be removed from the roads for five and a half years.

**Plans for nuclear new build**

We agree with the Government's assessment in the revised draft National Policy Statements that 18GW of new non-renewable capacity will be needed by 2025,

and agree with the policy that new nuclear power should be free to contribute as much as possible towards this capacity. We intend to build four new nuclear plants at two sites in the UK with the first operational by 2018 – subject to a robust investment framework. Our preferred sites are Hinkley Point in Somerset and Sizewell in Suffolk, but other sites may be needed.

**Nuclear non-proliferation**

In a period when nuclear energy is attracting considerable worldwide interest it is important that all those in the industry and the national regulators continue to respect their responsibilities with regard to non-proliferation. This is an issue that particularly affects companies providing nuclear fuel cycle services but utilities like EDF Energy also have a part to play.

In Our Sustainability Commitments, published in June 2010, we stated that we will “not allow nuclear materials from our business to be used for non-peaceful purposes”. We are a civilian nuclear energy business. We will not give permission for our materials to be used in a military context and we will take all necessary measures to prevent them being used for terrorist activity.

We comply fully with safeguards, legislation and UK obligations. Safeguards are measures enforced through independent regulation to ensure that civil nuclear material is accounted for and is not diverted for uses other than those declared.

We know where all our nuclear material is and take full responsibility for its security on each one of our nuclear sites, working closely with the Nuclear Security Regulator, the UK Nuclear Directorate's Office for Civil Nuclear Security (OCNS). In addition, these sites all have an armed presence in the form of the Civil Nuclear Constabulary.

Movement of all nuclear materials is carried out under plans approved by the UK's nuclear security regulator. Movements of spent nuclear fuel take place in highly robust steel casks and, once at its destination, the material is subject to the same safeguards and security controls that are applied at the power stations.

**Nuclear safety**

We have operated safely (EDF Energy and predecessor companies) for 50 years in the UK and work to some of the highest safety standards of any global industry.

The safety of nuclear installations in the UK is assured by a system of regulatory control based on a licensing process, controlled by the Health and Safety Executive (HSE), by which a corporate body is granted a licence to use a site for specified activities. The Nuclear Installations Act (NIA) allows the HSE to attach to each nuclear site licence such conditions as it considers necessary or desirable in the interests of safety. The HSE has developed a standard set of 36 conditions which are attached to all nuclear site licences.

The NIA places the responsibility for the safety of a nuclear installation on the licensee and many of the licence conditions require the licensee to ‘make and implement adequate arrangements’ to control some aspect of risk. Compliance with these conditions is monitored and inspected by the Office for Nuclear Regulation (ONR) which administers the licensing function on behalf of the HSE.

**Number of nuclear safety events**

The International Nuclear Event Scale (INES) is a rapid alert system used for consistent communication of events across the nuclear industry. These are categorised between Level 1, which is an anomaly with no impact on the safety of the general public or workforce, and Level 7 which represents a major accident. No nuclear events in 2010 were rated higher than INES Level 1 and we had a total of 13 INES Level 1 events.

**Nuclear reportable events (NRE)**

Over the last five years, the reactors operated by EDF Energy Nuclear Generation have seen an overall safety improvement linked to a major effort to upgrade the facilities and a strong emphasis on further improving equipment reliability and operational focus.

The rate of occurrence of events related to the INES level events and Nuclear Reportable Event indicators is less than one event per reactor-year of operation.

These present only minor failures in very reliable plant and management systems to protect safety and maintain legal compliance. Fluctuations from year to year in the number of such events are expected, and efforts to improve our arrangements and reduce the incidence of these events further are continuing.

Our site license requires comprehensive arrangements for reporting and investigating incidents at our power stations to the ONR. The most significant of these are known as *Nuclear Reportable Events*. In 2010 we had nine such events.

The NRE and the events rated at Level 1 or 2 on the INES are distinct but overlapping sets of events. Within EDF Energy Nuclear Generation a number (~50,000) of ‘conditions adverse to quality’ are reported each year. Each of these reports is categorised and allocated either to immediate action, to further investigation or for data trending.

A very small number of events are identified as requiring formal reports to the Office for Nuclear Regulation (ONR) under our Site Licence Compliance arrangements or the reporting requirements of responsible Government departments. These are the Nuclear Reportable Events. Each such event will be rated on the INES but because the reporting is determined by the type of event rather than its severity, some may be rated at INES Level 0. A wider range of events are notified to the ONR and/or other interested parties and all such events whose descriptions are potentially public receive an INES rating. This means that some events which are not nuclear reportable may nevertheless be rated at INES Level 1. This provides great scrutiny of nuclear safety, our number one priority.

#### Collective radiation dose

We operate strict procedures to minimise and control the radiation doses received by employees and contractors at all of our nuclear power stations. Any worker required to enter a radiological controlled area is issued with an electronic personal dosimeter which measures radiation dose and warns the wearer if pre-determined dose levels are exceeded.

Radiation dose is measured in milliSieverts (mSv). The legal dose limit is 20 mSv per year. In the calendar year 2010, the average individual dose received by all workers on our sites was 0.042 mSv. The highest individual dose received was 4.388 mSv, which is about half the value for 2009.

The three-year average yearly World Association of Nuclear Operators (WANO) collective radiation dose for our nuclear generation plants at the end of 2010 was 0.106 manSv/reactor compared to 0.117 manSv/reactor in 2009. The one-year average collective radiation dose for our current nuclear generation plants at the end of 2010 was 0.036 manSv/reactor compared to 0.116 manSv/reactor in 2009.

The 2010 levels are higher than we anticipated due to repair work at both Sizewell B and Heysham 2. The company's performance in this area remains among the best in the world when compared to nuclear reactors worldwide.

#### Unplanned Automatic Trip Rate (UATR)

Following the indications of a deteriorating trend in our 2008/2009 UATR performance we carried out a comprehensive fleet level review into the reasons for this and put improvement plans in place. This has resulted in significant performance improvement. The overall UATR for all our nuclear stations at the end of the calendar year 2010 was 0.58. The long-term trend since 2003/2004 continues to improve.

#### Nuclear fuel cycle

An advantage of uranium is that it is a very productive fuel. A single tonne of nuclear fuel can produce the same amount of electricity as 20,000 tonnes of coal. This means that the volumes of waste generated are relatively low.

#### Fuel loaded into our reactors

For the first time we are reporting the amount of fuel loaded into our reactors. In 2010, we loaded 163 tonnes (heavy metal) of fuel into our reactors.

#### Nuclear waste

We manage our nuclear waste under very tight regulation from the Office for Nuclear Regulation, the Environment Agency, and the Scottish Environment Protection Agency. Radioactive waste is classified as High Level Waste (HLW), Intermediate Level Waste (ILW) or Low Level Waste (LLW) according to its radioactivity level.

#### Higher Activity Waste (HAW) long-term storage and disposal

The stated strategic end point for HAW (i.e. ILW, HLW and spent fuel) is disposal – i.e. managed storage leading to disposal. The UK Government policy is to pursue Geological Disposal Facilities (GDF). However the policy in Scotland differs from the rest of the UK. Here policy is “near surface, near site” storage or disposal facilities so that waste can be monitored and retrieved, and the need for transporting it over long distances is minimised. UK Government studies are now being carried out to create a single location which can safely

store all ILW, HLW and spent fuel. Over the years, various options have been considered, including storage above ground, underground storage in an engineered store, and even deep-ocean trenches.

With hazardous waste, the bottom line for any possible solution is the same: how can we separate it completely from people and the environment, and monitor, manage and protect it?

#### Underground disposal – GDF

Studies into the best disposal options have been ongoing for more than 25 years in the UK alone. In July 2003, an independent task force, the Committee on Radioactive Waste Management (CoRWM), was established to review and assess all options, and make recommendations to the Government. CoRWM reported its findings in July 2006, and recommended ‘geological disposal’ as the solution for the long-term storage of the most hazardous radioactive wastes. This will involve constructing an engineered storage facility at a depth of between 200 metres and 1 kilometre below ground.

In addition to barriers provided by purpose-designed containment, the surrounding rock structure would provide a further shield against any potential release of radioactivity. Underground locations provide a natural storage facility. After all, billions of cubic metres of natural gas have existed and stayed there for many millions of years.

In comparison, nuclear waste is a relatively simple proposition: it will need a minute fraction of the space, and it will be in a solid and stable form.

#### Timescales

A UK GDF facility will take many years to become a reality. A suitable location needs to be found, and like any major planning project, it must be acceptable to local people. A Scottish Government strategy to implement the “near surface, near site” storage or disposal facilities will also take many years to come to fruition. Meanwhile, higher-activity wastes can continue to be safely stored for as long as required at power stations, and other licensed nuclear sites. It should be noted that we support UK Government's intention to construct a central GDF for HAW. Until this is constructed, the waste from our operations is stored safely and securely at our power stations or at Sellafield.

### Progress made towards a solution during 2010

Over the last year we have been working with Government, regulators, NGOs and others on the implementation of a long-term UK radioactive waste solution in three main ways:

- We have made good progress in demonstrating that the small quantities of radioactive waste produced as a result of generating electricity from the European Pressurised Reactor (EPR) will be able to be safely disposed of in the UK's planned GDF.
- We have been working jointly with other potential nuclear operators and the Nuclear Decommissioning Authority (NDA) to identify opportunities to improve the implementation of the UK's waste strategy. For further information please visit: [DECC](#)
- We actively participated in the Scottish Government's consultation and associated working groups regarding Scotland's higher activity waste policy.

### Long-term higher activity waste solutions – Scotland

The Scottish Government has now formally published *Scotland's Higher Activity Radioactive Waste Policy 2011*. Their policy is to: "Support long-term near surface, near site storage or disposal facilities so that the waste is monitored and retrievable and the need for transporting it over long distances is minimal." We actively participated within the policy consultation and associated working groups making a formal submission to the consultation.

The consultation and associated works were key to the development of the policy which will secure a robust waste management strategy for the long term in Scotland. It should be noted that there is no impact on Torness and Hunterston B's current operations, and that we are actively engaging with the ongoing implementation of the policy, including participating in Scottish Government and NDA lead working groups.

### EPR waste disposal

The NDA's Radioactive Waste Management Directorate (RWMD) is responsible for determining whether radioactive wastes will be disposable to the planned GDF. A part of the UK's Generic Design Assessment (GDA) process, to carry out a Disposability Assessment for the higher activity wastes and spent fuel expected to arise from the operation of an EPR. RWMD published their conclusions in January 2010 and concluded that, compared with legacy wastes and existing spent fuel, no new issues arise that challenge the disposability of wastes and spent fuel expected to arise from EPR operation. This conclusion was supported by the similarity of the wastes to those expected to arise from the existing Pressurised Water reactor (PWR) at Sizewell B. Given a disposal site with suitable characteristics, the wastes and spent fuel from the EPR are expected to be disposable.

### Intermediate Level Waste

Intermediate Level Waste is much less radioactive than spent fuel but will still need to be disposed of to the UK's planned GDF in a suitably conditioned and packaged form. For the UK EPR, we plan to use packaging solutions that have been successfully and safely applied over many years throughout the French EDF power station fleet. The mechanisms for processing and packaging of the waste differ from the standard UK approach and we have therefore been working with the regulators to develop a wider understanding, drawing on the experience of our colleagues throughout EDF.

Using this information we have begun to develop conceptual Letters of Compliance, for submission to RWMD, for all Intermediate Level Waste that will be generated during the operation of the UK EPR. A Letter of Compliance is the formal mechanism by which RWMD accepts that conditioned and packaged wastes will be suitable for disposal to the GDF. We are also establishing a contract with RWMD to enable the assessment of Letter of Compliance submissions for new build wastes and spent fuel.

### UK waste strategy

The UK Government has set out a Waste Base Case which describes the arrangements and assumptions for managing and disposing of waste from new nuclear stations. We have been working with other prospective new nuclear power

station operators, under the umbrella of the NIA, to look at how we could support these arrangements and whether there were improvements that could be implemented. We commissioned RWMD to review a number of key issues impacting the disposal of waste and spent fuel from new nuclear power stations. As a result the RWMD has produced and published a feasibility study exploring options for storage, transport and disposal of spent fuel from potential new nuclear power stations.

The study concludes that whilst the current Waste Base Case provides effective arrangements to manage and dispose of waste from new nuclear stations, there are a number of feasible alternative options which could optimise the management of spent fuel. These include the planning of storage and packaging, and alternative disposal casks. The study notes that there is potential to look at alternative GDF disposal concepts and ways in which the length of time needed for on-site storage of spent fuel could be reduced. The RWMD work is preliminary and conceptual in nature and we intend to work with them to develop some of the options in more detail.

### Spent fuel

HLW arises from the reprocessing of our spent AGR nuclear fuel at Sellafield. The spent AGR nuclear fuel is transported to Sellafield in specially designed flasks. The spent fuel from our AGRs can be temporarily stored in cooling

ponds on site. Spent fuel at our PWR at Sizewell remains in storage on the site. In 2010, 132 tonnes of spent uranium was sent off site excluding cladding and packaging measured as a weight of unirradiated uranium. At the end of 2010, 512 tonnes (heavy metal) of spent fuel was stored in our cooling ponds.

We have contracts with the Nuclear Decommissioning Authority (NDA) for the management of our spent AGR fuel. We also monitor the performance and progress of the management by the NDA (and its subcontractor, Sellafield Ltd), of materials created from our fuel. Under our contracts, the NDA determine whether spent fuel is reprocessed to separate uranium and plutonium for possible future use or stored for the longer term. Spent fuel is not considered waste until a decision has been taken to dispose of it. In either case, safety and protection of the environment are paramount.

### Radioactive waste intensity

For the first time, we are reporting the high-level radioactive waste intensity specific to EDF Energy's nuclear generation fleet. For the most recent disclosure period (1 April 2009 to 31 March 2010), this was 0.007g/kWh. This has been calculated using the methodology set out in the UK Government's Electricity (Fuel Mix Disclosure) 2005 regulations.



### Amount of Intermediate Level Waste generated

The ILW indicator is derived from the UK's 2010 radioactive waste inventory produced by DECC and the NDA in association with the waste producers. It includes estimates, provided by the waste producers, of the annual volume of ILW that will be produced throughout the sites' lives. It was estimated in the 2010 radioactive waste inventory that 162m<sup>3</sup> of ILW would need to be disposed of from our sites in 2010.

This waste volume is the packaged waste volume for disposal, based on currently proposed waste package types. ILW includes sludge and resins from the treatment of radioactive liquids, and graphite and metallic components from spent nuclear fuel assemblies. All ILW is safely stored on site in appropriately engineered and shielded facilities, pending the availability of an appropriate disposal route. Appropriate controls are in place to minimise the volumes of waste generated to reduce the volume of waste requiring disposal.

### Disposal of radioactive waste

All of Nuclear Generation's power stations are granted authorisations to dispose of radioactive waste by either the Environment Agency (in England) or the Scottish Environment Protection Agency (in Scotland). These authorisations require us to record the amount of waste sent off-site each year through different treatment or disposal routes. According to UK law, low level waste (LLW) is waste with a radioactive content not exceeding 4 GBq per tonne of alpha, and 12 GBq per tonne of beta/gamma activity. The data in this report is compiled from information required for the annual return forms submitted to the regulator to satisfy our authorisation conditions. Most of our waste is lightly contaminated material such as redundant equipment, used/worn protective clothing, metal, wood and rubble.

There are a number of treatments that are carried out on waste prior to disposal, for example shredding or compacting to reduce the overall volume for disposal. The volume of waste from all of our stations sent off-site to be disposed of at the designated National LLW Repository near Drigg in Cumbria, (LLWR) incinerated at Hythe, or metal sent for recycling at Lillyhall in Cumbria was 498m<sup>3</sup> of packaged waste in 2010.

There have been some changes that have happened in the area of radioactive waste management over the last 12 months, which are aimed at prolonging the life of the LLWR.

The ability to treat radioactively contaminated metal is now a reality, and there is a new waste route that we have used in 2010 for three of our power stations. The Studsvik Metal Recycling Facility (MRF) is the first new nuclear licensed site to be brought into operation in the UK in over 20 years.

Low level radioactive metals are processed at the facility by a range of innovative techniques including size reduction and a process called shot-blasting.

By decontaminating metallic waste, the quantity of waste needing disposal at the LLWR is greatly reduced, while at the same time Studsvik recovers valuable metal for recycling. This has the benefit of substantially reducing the final amount of waste for disposal – for example, one shipment resulted in 95% of the metal being cleaned and made available for re-use with only 5% of the original amount being sent as waste.

Over the coming year it is envisaged that this new route will be rolled out across the rest of our power stations, to help minimise the amount of our waste that has to go for final disposal at the LLWR. Future improvements in incineration techniques and the adoption of a lower category of waste for disposal (Very Low Level Waste) remain on the horizon, and this is something that we are actively involved in.

### Radioactivity in the environment

The Food Standards Agency, the Environment Agency, the Scottish Environment Protection Agency and the Northern Ireland Environment Agency independently monitor any radioactivity present in food and the environment due to radioactive discharges from nuclear sites. The monitoring data are used to determine the highest radiation dose received by members of the public in the vicinity of each site. A joint report is published annually entitled *Radioactivity in Food and the Environment* and is available on the above agencies' websites.

The most recent data available are for 2009. The maximum dose reported for discharges to air attributable to a nuclear generation site (allowing for discharges from any neighbouring site) was 0.007 mSv at Hunterston B. To put this into context, this is broadly similar to the radiation dose received by taking single flight from London to Rome.

The maximum dose reported for discharges to sea attributable to a nuclear generation site was 0.014 mSv at Hartlepool. This is the equivalent to almost half the dose received by taking a single flight from Brussels to Singapore. These doses should also be compared with the UK annual public dose limit of 1 mSv for the controlled release of radioactivity from artificial sources, and the average UK annual dose of 2.2 mSv received by the general public due to natural radiation.

For more detailed information on nuclear facts and figures please visit: [www.world-nuclear.org](http://www.world-nuclear.org)

INDICATOR	DEFINITION	NUCLEAR GENERATION DATA	
		2009	2010
<b>NUCLEAR SAFETY</b>			
Number of Nuclear Safety Events	Number of nuclear safety events rated International Nuclear Event Scale (INES) Level 1 (lowest).	11	13
	Number of nuclear safety events rated International Nuclear Event Scale (INES) Level 2.	1	0
Number of Nuclear Reportable Events	Events that have to be reported formally in writing to the Health and Safety Executive's Office of Nuclear Regulation (ONR) per our site licence compliance arrangements.	5	9
Collective radiation dose (man-mSv/reactor)	One year average collective radiation dose measured in manSieverts per reactor as defined by the World Association for Nuclear Operators (WANO)	0.116	0.036
Collective radiation dose (man-Sv/reactor)	Three-year average collective radiation dose as defined by WANO.	0.117	0.106
Unplanned automatic trip rate	Number of unplanned automatic trips per 7,000 hours of operation as defined by WANO. A low figure indicates that the reactor is controlled well within its safety limits and is operating reliably.	0.82	0.58

NUCLEAR FUEL CYCLE	DEFINITION	2009	2010
Fuel loaded into the reactors	Quantity of nuclear reactor fuel loaded during the calendar year in tonnes (heavy metal), contained within the fuel assembly.	215	163
Spent fuel sent off-site	Tonnes (uranium) of spent fuel sent off-site excluding cladding and packaging measured as a weight of un-irradiated uranium in tonnes.	147	132
Spent fuel stored in our cooling ponds	Amount of spent fuel stored in our on-site cooling ponds at our AGRs and PWR measured in tonnes (heavy metal) <sup>5</sup> .	470	512
Amount of Intermediate Level Waste (ILW) generated (m <sup>3</sup> )	The ILW indicator provided by EDF Energy is derived from the UK's 2010 radioactive waste inventory produced by the Department of Energy and Climate Change (DECC) and the Nuclear Decommissioning Authority (NDA). It provides an estimate of the annual arising volume of waste that will be disposed of as ILW at the end of the site's life. The waste volume is given as a packaged waste volume based on currently proposed waste package types. All ILW is stored safely on power station sites pending the availability of an ILW disposal route.	170	162
Disposals of radioactive waste (m <sup>3</sup> )	The total amount of radioactive waste (Low Level Waste (LLW) or waste that will be disposed of as LLW) sent from all Nuclear Generation sites in 2010 for treatment or disposal.	607	498
High-level radioactive waste intensity (g/ kWh)	Relative measure of radioactivity based on the UK Government's definitions in "The Electricity (Fuel Mix Disclosure) Regulations 2005". Data provided is the total weight of spent fuel (heavy metal) adjusted to account for the fuel assembly cladding divided by our Nuclear Generation output during the disclosure period (April 2009 to March 2010).	–	0.007

<sup>5</sup>Based on the OECD Brown Book definition. Additional spent fuel storage capacity is held between the cooling pond and reactor.

## Assurance

We want to make sure that what we report is open, honest, clear and accurate.

To do this, we use independent external auditors to check every detail and to challenge us as we develop our reporting. Details of this assurance process and the findings of our assurance providers, Two Tomorrows, follow in this section.



### How data is assured internally

While producing comprehensive and balanced management performance reports is important, it is not enough on its own. It is necessary to ensure that all data is robust. To assure our data, we have gone beyond the standard practice of relying solely on automatic systems as a means of control. Instead, we have established a company assurance and data control management role within our Business Performance and Internal Control team. That role is to review evidence and to check and challenge data across our business.

We also employ external assurance providers to carry out additional annual checks on our systems and data.

### Report assurance

For the fourth year, our report has been independently assured by Two Tomorrows.

The assurance was conducted in accordance with the AccountAbility Assurance Standard (AA1000AS) (2008), Type 2 assurance.

This looks at how we follow the principles of inclusivity, materiality and responsiveness in our reporting. It also considers the reliability of performance information.

In their assurance of our Sustainability Performance Report 2009 (published in August 2010), Two Tomorrows made a number of high-level observations and recommendations. We have responded to these as outlined in the table below.

TOPIC	TWO TOMORROWS' RECOMMENDATION IN 2009	OUR RESPONSE
Inclusivity	We recommend that in future reports, the in 2009/2010 statement by the stakeholder panel should comment more directly about their observations on EDF Energy's handling of specific topics that were discussed during the year.	Our Stakeholder Advisory Panel have produced a statement that clearly outlines how we have dealt with specific challenges.
Material issues	This year EDF Energy has produced a radically different report to previous years, following stakeholder consultation on material issues undertaken in autumn 2009. This report is shorter and more focused than previous reports, and this new format provides a sound basis for future reporting. However reporting and commentary on performance against commitments is brief and further detail would enhance future reports.	Our 2010 report now provides a more detailed analysis on the progress against each of our commitments. We have also outlined in more depth the initiatives and projects to support the delivery of Our Sustainability Commitments.
Responsiveness	Future reports would also benefit from more explicit recognition of the expectations and concerns held by specific stakeholder groups in relation to EDF Energy's actions and performance on material issues.  EDF Energy should provide relevant information on price changes during the year through its report, in addition to information already provided to customers.	Our stakeholder section has been expanded and now includes specific concerns raised by our stakeholders. We have also included a detailed description of how we responded to these concerns.  In the business strategy section of our 2010 report provides the details of any price changes that were implemented in the reporting period.  We have also developed a document titled 'What goes into my bill' which is being circulated to customers in 2011.

## Independent Assurance Statement

### Scope and objectives

Two Tomorrows (Europe) Limited has undertaken independent assurance of the EDF Energy Sustainability Performance Report 2010 (the Report). The assurance process was conducted in accordance with AA1000AS (2008). We were engaged to provide Type 2 assurance, which covers

- evaluation of adherence to the AA1000APS (2008) principles of inclusivity, materiality and responsiveness (the Principles) and
- the reliability of specified sustainability performance information.

Our objective was to achieve a moderate level of assurance for both adherence to Principles and for the reliability of performance information. The performance information included in scope was all data and key claims in the report. Any financial information contained within the Report is excluded from the scope of this assurance process, as are any links leading beyond the 2010 Sustainability Performance Report section of the EDF Energy website.

We used the Global Reporting Initiative (GRI) Quality of Information Principles as Criteria for evaluating performance information.

### Responsibilities of the directors of EDF Energy and of the assurance providers

The directors of EDF Energy have sole responsibility for the preparation of the Report. In performing our assurance work, our responsibility is to the management of EDF Energy, however our statement represents our independent opinion and is intended to inform all of EDF Energy's stakeholders. We adopt a balanced approach towards all EDF Energy's stakeholders.

We were not involved in the preparation of any part of the Report and this is the third year that we have provided assurance. During the year we have had one other contract with EDF Energy, to prepare a guide for suppliers on adherence to the principles of the United Nations Global Compact.

Our team comprised Jon Woodhead and Anne Euler. Further information, including individual competencies relating to the team can be found at: [www.twotomorrow.com](http://www.twotomorrow.com)

### Basis of our opinion

Our work was designed to gather evidence with the objective of providing moderate assurance as defined in AA1000AS (2008). We undertook the following activities:

- Review of the current sustainability issues that could affect EDF Energy and are of interest to stakeholders
- Interviews with selected directors and senior managers responsible for management of sustainability issues and review of evidence to support issues discussed. Interviewees were selected through discussion with the sustainability team.
- Review of EDF Energy's approach to stakeholder engagement
- Each year we choose a different business area for our site visit through discussion with the sustainability team. This year, we visited the Doxford site to review processes and systems for collecting and reporting sustainability data.
- Review of information provided to us by EDF Energy on its reporting and management processes relating to the Principles
- Review of supporting evidence for key claims in the Report
- Review of the processes for gathering, checking and consolidating data and, for a sample, checking the data consolidation

### Findings and Opinion

We reviewed and provided feedback on drafts of the Report and where necessary changes were made. On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe EDF Energy's adherence to the Principles or its performance.

Nothing came to our attention to suggest that the reported performance data have not been properly collated from information reported at operational level, nor that the assumptions utilised were inappropriate. We are not aware of any errors that would materially affect the presentation of overall company performance.

### Observations

Without affecting our assurance opinion we also provide the following observations.

This year's Report reflects the focus of EDF Energy's activities over the last year: in embedding sustainability, making progress against the 'Our Sustainability Commitments', and advancing the company's new nuclear generation plans. We understand that over the coming year EDF Energy will utilise external benchmarks of performance against other companies both within and outside the energy sector, to demonstrate differences in performance and inform existing plans. We are also aware that the 'Our Sustainability Commitments' will be reviewed, to ensure their continued relevance to the operations of the business and its performance.

### Inclusivity concerns the participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

- The Report includes an enhanced section describing stakeholder concerns, and the company's response. This provides useful information, however some topics could be covered in more detail; for example local community concerns relating to nuclear new build sites. We understand that opinion polls have been undertaken and that the results will be published in the 2011 report.
- The statement by the Stakeholder Panel comments on EDF Energy's management of some specific issues. In our opinion it is important for the credibility of the Panel process to also demonstrate an effective challenge on company strategy and action. We recommend that future statements by the Stakeholder Panel should provide more insights into the views and challenges raised by the Panel during the year.
- The report includes top level information on the four key strategic issues discussed with the Panel during 2010 and the actions undertaken by EDF Energy as a result. We recommend that topics for consideration by the Panel in the coming year should include fair pricing (how EDF Energy can differentiate itself and achieve positive recognition for communications on energy pricing), and employee diversity (in particular at senior levels of the company).

### Material issues are those which are necessary for stakeholders to make informed judgments concerning EDF Energy and its impacts.

- We are not aware of any material issues that have been excluded. In our statement for last year's report we noted that future reports could become even more focussed if EDF Energy were to prioritise the range of material issues they address. EDF Energy conducts regular materiality review work, and we recommend that in future Reports the process for determining and prioritising material issues should be explained in more detail in the report.
- The report includes information on the company's plans for building new nuclear power stations. Additional information that should also be provided includes the scale of these investments, how these investments will be funded, and the financial context in which these investments are made. This would provide important context for many of the other topics included in the report. We also recommend that future reports provide a clearer vision of the future impacts of new generation assets in terms of reducing CO2 and other positive impacts, once the construction of new nuclear and other planned generation assets have been completed.

### Responsiveness concerns the extent to which an organisation responds to stakeholder issues

- EDF Energy engages with a broad range of stakeholders on a variety of sustainability issues and has continued stakeholder consultation on material issues. We recommend that future reports should provide an overview of the views and expectations of stakeholders through these consultations, in relation to EDF Energy's actions and performance on material issues.
- EDF Energy has developed a number of mechanisms for outreach and information provision on plans for new nuclear generation. Future reports should include information on measures to assess the effect of these mechanisms.
- EDF Energy's efforts to increase transparency on nuclear reporting are commendable. We recommend that reporting on nuclear processes and performance should be simplified and the context for performance further explained, to make this information more accessible for stakeholders. The launch of the "Energy Future" website will contribute to this process.

- Last year we also recommended that in future EDF Energy should provide relevant information on how the company assesses the success of measures to protect vulnerable customers and those affected by fuel poverty, and the actions taken by the company to communicate with stakeholders on price changes, above and beyond the mandatory communications required by regulatory authorities. We recognise that EDF Energy has recently published a new pricing website and produced information for inclusion in customer bills, explaining how and why prices have changed. We recommend reporting information on the range of tariffs available to EDF Energy customers, and what support is accessible to assist customers in selecting the most appropriate tariff.

### Performance Information

- The amount and quality of supporting evidence provided by EDF Energy's internal validation process continues to strengthen the assurance process, and is a clear example of best practice in this sector.
- The report provides information on key initiatives for delivering against the Sustainability Commitments.
- In reporting performance against the Commitments, the Report includes an improved level of explanation of the key factors in achieving this year's performance. For some Commitments, for example 'We will commit to keeping our prices competitive' and 'We will reduce the proportion of CO2 arising from our customers' energy consumption' additional details are required to demonstrate progress, and it would be helpful to include targets or benchmarks for the Business Ambitions to enable stakeholders to put this performance into context.
- The Report includes new data and information on the amount of fuel loaded into reactors, and radioactive waste intensity. We recommend that additional explanation should be provided in future reports to assist readers in understanding the sustainability significance of these data.
- The Report also shows that safety performance continues to improve after the fatality in 2010. We recommend that future Reports should include more detailed commentary on safety performance, and activities to manage safety risks.

### Two Tomorrows (Europe) Limited

London  
November 2011

**Jon Woodhead**  
Group Director

**Anne Euler**  
Senior Consultant

*Two Tomorrows (Europe) Limited trading as Two Tomorrows. Two Tomorrows is an international consultancy that helps companies to perform better and create value by doing business in a sustainable way. [www.twotomorrow.com](http://www.twotomorrow.com)*

## Our business performance at a glance

AMBITION	MEASURE	UNIT	2010	2009	2008
Zero harm	Lost time incidents rate	Per 1,000,000hrs worked (including employees and contractors)	1.12*	1.74	3.26
	Primarily work-related ill-health (employees)	Per 1,000,000hrs worked	4.21*	4.21	5.78
	Unplanned automatic trip rate	Per 7,000 hours of operations as defined by WANO	0.58	0.82	****
Financial performance	Sales	£	9,145	9,836	769
	Electricity	£	7,214	7,812	6,616
	Gas	£	958	870	4,701
	Other	£	973	1,154	860
	EBITDA	£	2,339	2,702	1,060
	Net assets	£	16,376	15,499	3,025
Customers choice	Supply preference rate	%	82.5	83.1	82.8
	Priority service numbers				
	Gas	Number	95,590	87,061	70,418
	Electricity		236,912	226,082	197,173
	Number of customers receiving free energy efficiency advice	Number	32,891	41,553	17,547
Customer satisfaction rate:	Gas	%	57	57	61
	Electricity		57	59	61
High-performing people	Employee performance index	%	68**	59	62
	Number of employees	Number	15,441**	20,077	13,406
	Number of days lost to sickness	Number	119,884**	164,181	132,795
	Number of leavers	Number	1,307**	1,385	1,733
	Number of working hours	Number	27,115,624**	38,172,394	24,239,225
	Number of female employees	Number	4,739**	5,510	4,374

AMBITION	MEASURE	UNIT	2010	2009	2008
Sustainable performance	NOx emissions	Tonnes	27,255	30,649	38,637
	SO <sub>2</sub> emissions	Tonnes	13,580	13,408	12,377
	Total net generation	TWh	63.7	71.7	27.3
	CO <sub>2</sub> intensity from generation	Tonnes/Gwh	218	219	804
	CO <sub>2</sub> from commercial buildings	'000 tonnes	32.5***	33.3	22.6
		Tonnes Per/FTE	1.69***	1.72	1.77
	CO <sub>2</sub> from transport	'000 tonnes	28.1***	30.7	25.9
		Tonnes Per/FTE	1.46***	1.59	2.04
	Amount of CO <sub>2</sub> arising from customers' energy consumption reduced	CO <sub>2</sub> tonnes abated	0.6	0.5	0.3
	Employee understanding of their part in delivering Our Sustainability Commitments	%	76**	71	75
Managed building waste to landfill	%	13.4***	31.5	37.9	
Eligible customers on discounted tariff	Number	165,102	158,110	126,723	
Children engaged by our sustainable Schools Programme	Number	3,115,451	498,488	53,698	
Leader in nuclear power	Collective radiation dose (man-Sv reactor)	l-year average collection radiation dose as defined by WANO	0.036	0.116	0.174
	Collective radiation dose (man-Sv reactor)	3-year average collection radiation dose as defined by WANO	0.106	0.117	0.138
	Number of nuclear safety events rated International Nuclear Event Scale (INES) Level 1 (lowest)	Number	13	11	****
	Number of nuclear safety events rated International Nuclear Event Scale (INES) Level 2	Number	0	1	****
Uranium sent off-site	Tonnes	132	147	****	
Amount of Intermediate Level Waste (ILW) generated	M3	162	170	****	
Amount of Low Level Waste (LLW) sent off-site	M3	498	607	****	

\* Networks excluded for Nov/Dec 2010

\*\* Excludes networks

\*\*\* 12 month rolling performance to Nov 2010 includes networks

\*\*\*\* Data not reported by EDF Energy and is available in the British Energy 2008/2009 CSR Report

## Definitions

Our industry uses some complicated terms and precise definitions. This section explains some of those terms in more detail.



### CO<sub>2</sub> avoided (MtCO<sub>2</sub>)

**Definition:** Amount of CO<sub>2</sub> that would have been emitted if the energy generated by nuclear generation had been produced by fossil fuel sources.

### CO<sub>2</sub> (DECC)

**Definition:** The carbon dioxide emissions from our generating plants are determined in accordance with the site specific Environment Agency permits issued under the Greenhouse Gas Emissions Trading Scheme Regulations 2005 (S.I.2005 No 925) ("ETS Regulations"). The UKAS accredited organisation CICS conduct annual verification audits of the greenhouse gas emissions data reported by EDF Energy, which once verified are submitted to the Environment Agency and entered onto the EU ETS Registry.

### CO<sub>2</sub> emissions from business travel (Kton)

**Definition:** Tonnes of CO<sub>2</sub> emitted from business travel (air, road and rail). CO<sub>2</sub> calculated using conversion factors as defined by Department for Energy, Food and Rural Affairs (DEFRA).

### Energy Assist and Fuel Poverty

**Definition:** Our vulnerable customers assisted by means of our discounted tariff are defined as those customers living in or at risk of fuel poverty. The UK Government definition of a household in fuel poverty is one who spends more than 10% of their net income on gas, electricity or other fuels in order to keep warm – this in turn is defined using the World Health Organisation definition that in order to keep warm, a home should be heated to 21 degrees in the lounge and 18 degrees in all other rooms. It is our assumption that households living on income support or pension credit benefits are very likely to be spending more than 10% of their income on energy bills. The discounted tariff, Energy Assist, therefore benefits vulnerable customers who are in receipt of income support or pension credit, or who can otherwise prove that they are fuel poor.

### NO<sub>x</sub> emissions

**Definition:** The emissions of Nitrogen Dioxide (NO<sub>x</sub>) from our coal-fired power stations are regulated by the Environment Agency under the Pollution Prevention and Control (PPC) permits and in accordance with the Environment Agency document "A Framework for the Regulation of Existing Large Coal- and Oil-Fired Combustion Plant at Power Stations in England and Wales: 2008-15". Data is audited periodically by Deloitte on behalf of the EDF Group.

### Office and depot waste

**Definition:** Office and depot waste is any waste that arises from EDF Energy business activities undertaken at an office or depot. It includes office waste streams such as paper, cardboard, IT equipment, furniture and plastic cups Depot waste streams can include metals and transport waste, and operational projects where EDF Energy has the Duty of Care for the waste. It excludes by-products, such as ash from power generation and spoil from street works. Office and depot waste is re-used, recycled or disposed of through assigned, dedicated and specialist disposal routes managed as part of a contract with waste service providers. The volumes of waste are supplied to EDF Energy by its waste contractors and business performance reporting of that data is carried out in-house. Processes and procedures are periodically audited by DNV as part of our ISO 14001 and OSHAAS 18001 accreditations.

### Pod schools registered

**Definition:** The Pod provides registered teachers with lesson plans, resource packs, activities, games and a place to blog and to share ideas about green issues including energy, water, waste, transport and biodiversity. It also provides materials that students can use to inspire parents and the local community to be greener. Data relating to the number of schools, teachers and students registered to [www.jointhepod.org](http://www.jointhepod.org) is sourced from the website's content management system. This system is also used to measure engagement with the programme. Engagement calculations are based on registration information provided by users when they register with the site such as the number of pupils in the school, the level and type of interaction with different Pod resources, the target student size for particular activities and a set of assumptions such as average class size etc.

#### Sulphur Dioxide (SO<sub>2</sub>) emissions

**Definition:** The emissions of SO<sub>2</sub> from our coal-fired power stations are regulated by the Environment Agency under the Pollution Prevention and Control (PPC) permits and in accordance with the Environment Agency document "A Framework for the Regulation of Existing Large Coal- and Oil-Fired Combustion Plant at Power Stations in England and Wales: 2008-15". Data is audited periodically by Deloitte on behalf of the EDF Group.

#### Team Green Britain (TGB)

**Definition:** TGB member data is stored in a database held by a third party agency. The database receives a number of different feeds of new sign-ups to allow us to track the source. At present these can be summarised as:

- sign-ups through the TGB website
  - sign-ups completed through our Customer Services (entered by our agents on a unique website)
  - sign-ups through marketing and brand activity (input from response files)
  - sign-ups as part of products such as Eco2020, which are provided by the website hosts Energylinx
  - sign-ups gained by our field agents, which are completed on cards and manually entered by a mailing house
- A weekly report is extracted of the number of sign-ups per channel and the overall volume.

#### Amount of Intermediate Level Waste (ILW) generated (m<sup>3</sup>)

**Definition:** The Intermediate Level Waste Indicator provided by EDF Energy is derived from the UK's 2010 radioactive waste inventory produced by the Nuclear Decommissioning Authority. It provides an estimate of the annual arising volume of waste that will be classified as Intermediate Level Waste at the end of the site's life. The waste volume is given as a packaged waste volume based on the Nuclear Decommissioning Authority proposed waste package types. All Intermediate Level Waste is stored on power station sites pending a national decision on final disposal.

#### Amount of Low Level Waste sent off site (m<sup>3</sup>)

**Definition:** UK Low Level Waste (LLW) sent off site having a radioactive content not exceeding 4 GBq (gigabecquerels) per tonne of alpha, or 12 GBq per tonne of beta/gamma activity.

#### Collective radiation dose (man-Sv reactor)

**Definition:** Three-year collective radiation dose as defined by the World Association for Nuclear Operators (WANO).

#### Number of nuclear safety events

**Definition:** Number of nuclear safety events rated higher than International Nuclear Event Scale (INES) Level 1 (lowest) representing anomalies that have no impact on the safety of the general public or our employees.

#### Number of reportable nuclear events

**Definition:** Events that have to be reported formally in writing to the Health and Safety Executive's Nuclear Installations Inspectorate (NII) per our site licence compliance arrangements.

#### Tonnes of uranium sent off site

**Definition:** Tonnes of spent fuel sent off site excluding cladding and packaging measured as a weight of unirradiated uranium in tonnes.

#### Unplanned automatic trip rate

**Definition:** Number of unplanned automatic trips per 7,000 hours of operation as defined by WANO.

#### CESP

**Definition:** The Community Energy Saving Programme (CESP) has been created as part of the Government's Home Energy Saving Programme. It requires gas and electricity suppliers and electricity generators to deliver energy-saving measures to domestic consumers in specific low income areas of Great Britain. CESP has been designed to promote a 'whole house' approach and to treat as many properties as possible in defined areas.

#### Employee numbers

**Definition:** The number of EDF Energy permanent full/part-time employees by headcount.

#### London Warm Zone (LWZ)

**Definition:** London Warm Zone is a not-for-profit organisation working in partnership with local councils, the Government and EDF Energy. We make it easy for people who own their home or rent it from a private landlord to make energy efficiency home improvements and help them save money on their energy bills while reducing their carbon footprint.

An assessment form is completed on each site visit, details of which are recorded on a specialist Energy Efficiency database (called UNO). It is maintained by an external IT company (Energy Audit) and LWZ quarterly reports are extracted and checked by the individual regional directors before they are forwarded to the senior management team. They are also sent to the National Energy Action Board, along with summary and graphs.

#### Work causal ill health rate

**Definition:** The work causal ill-health rate is the number of musculoskeletal or mental ill-health incidents per 1,000 employees. Incidents are classified by our health service providers and only those where work is considered to be the most significant causal factor are included. Contractors and agency staff are excluded.

#### Employee engagement survey

**Definition:** To help us improve the way we engage with employees, we appointed a new employee survey provider, Towers Perrin-ISR (now known as Towers Watson) during 2009. As a leading global provider of employee and organisational surveys, Towers Watson has already provided survey design expertise and invaluable support in analysing results and helping us to set priorities for action.

#### LTI frequency rate

**Definition:** The Lost Time Incident (LTI) rate is the number of lost time incidents per 1,000,000 hours worked. Lost Time Incidents are defined as the number of workplace accidents that lead to a day or more off work. A day represents the next full working day following the accident. The measure covers all staff – employees, agency and contractors.

## Nuclear vocabulary and terminology

<b>AGR</b>	Advanced Gas-Cooled Reactor	<b>MtCO<sub>2</sub></b>	Million tonnes of carbon dioxide
<b>CoRWM</b>	Committee on Radioactive Waste Management	<b>NDA</b>	Nuclear Decommissioning Authority
<b>DECC</b>	UK Government Department of Energy and Climate Change	<b>NGO</b>	Non-Governmental Organisation
<b>EA</b>	Environment Agency	<b>NIA</b>	Nuclear Installations Act
<b>EPR</b>	European Pressurised Reactor	<b>NII</b>	Nuclear Installations Inspectorate
<b>GDF</b>	Deep Geological Disposal Facility for higher activity waste	<b>NSD</b>	Nuclear Safety Directorate
<b>gW</b>	Gigawatt	<b>OCNS</b>	The UK Nuclear Directorate's Office for Civil Nuclear Security
<b>HAW</b>	Higher Activity Waste	<b>PWR</b>	Pressurised Water Reactor
<b>HLW</b>	High Level Waste	<b>RWMD</b>	Radioactive Waste Management Directorate
<b>HSE</b>	Health and Safety Executive	<b>SEPA</b>	Scottish Environment Protection Agency
<b>ILW</b>	Intermediate Level Waste	<b>TWh</b>	Terawatt hours
<b>INES</b>	International Nuclear Event Scale	<b>UATR</b>	Unplanned Automatic Trip Rate
<b>LLW</b>	Low Level Waste	<b>WANO</b>	World Association of Nuclear Operators
<b>LoC</b>	Letters of Compliance		
<b>mSv</b>	milliSieverts		

### Sustainability queries

If you have feedback or questions relating to our vision for a low-carbon future, please contact:

#### **Karen Elgy** Sustainable Future Delivery Manager

EDF Energy  
Endeavour House  
Doxford International  
Business Park  
Sunderland  
SR3 3XL  
Telephone: 01915 125358  
karen.elgy@edfenergy.com

### Environmental queries

If you have feedback or questions relating to environmental management, please contact:

#### **Dr Jonathan Foot** Chief Environment Officer

EDF Energy  
80 Victoria Street  
London  
SW1E 5JL  
Telephone: 0203 126 2619  
jonathan.foot@edfenergy.com

### Performance queries

If you have feedback or questions relating to our performance, please contact:

#### **Nick Medicott** Company Assurance and Data Controller

EDF Energy  
80 Victoria Street  
London  
SW1E 5JL  
Telephone: 0203 123 2577  
nicholas.medlicott@edfenergy.com