

2010/11

nationalgrid

# Connecting our energy future

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Performance Summary

Welcome from Sir John Parker  
and Steve Holliday [p2](#)

Our business [p3](#)

Delivering now... [p4](#)

...and in the future [p6](#)

Your shares [p8](#)

# Welcome from Sir John Parker and Steve Holliday

National Grid is an international electricity and gas company based in the UK and northeastern US. We play a vital role in connecting millions of people to the energy they use, safely, reliably and efficiently.

## £14,343m

**Revenue\*** for 2010/11. Revenue for 2009/10: £14,007m (↑ 2%)

## £3,600m

**Operating profit\*\*** for 2010/11. Operating profit for 2009/10: £3,121m (↑ 15%)

## 11.9%

**Return on equity†** (3 year average) 2009/10: 11.3%

## £3.2bn

**Rights issue** (after costs)

## 36.37p

**Ordinary dividends** for 2010/11. Ordinary dividends for 2009/10\*: 33.68p (↑ 8%)

## 23.47p

**Final dividend** for 2010/11. Final dividend for 2009/10\*: 21.74p (↑ 8%)

## 17.08.11

**Final dividend payment date**

**We are delighted to report a solid set of results for the Company in 2010/11, on both sides of the Atlantic.**

### Financials

Group operating profit† has increased by 15% from £3,121m in 2009/10 to £3,600m in 2010/11. Earnings per share† increased by 4% from last year's restated 49.5p to 51.7p, despite the dilutive effects of the rights issue. The Board is proposing a final dividend of 23.47p per share making a total for the 2010/11 financial year of 36.37p per share. This is an increase of 8% – a growth rate which we are continuing to target for 2011/12.

### Investing for the future

The energy industry between now and 2050 is set to change dramatically and we will play a vital role in connecting new generation. The transition to a low carbon economy is set against a background of increasing population, challenging economic times and ageing power plants. An increasing number of our assets are reaching the end of their lives and we are already in the midst of a significant replacement and renewal programme. This presents us with a tremendous opportunity to invest in the latest technology and ensure we have a network that will meet the future challenges.

### Priorities

Our priorities for 2010/11 focused on our increased investment, US regulatory progress and changes in UK regulation. We continue to evaluate our strategy and recognise the importance of driving the business forward. We have listened to what our customers and regulators want from us, and therefore reshaped our organisation in the UK and, in particular, the US to help us become more responsive and effective. In April 2011, we moved to a regional business model with Nick Winsor, Executive Director UK and Tom King, Executive Director US.

### Our people

Our people remain at the centre of delivering our strategy. We are committed to developing them to the best of their abilities.

### Safety

Safety is at the core of our business and remains a top priority for the Board. We believe that, through our safety management processes and professionalism, we can mitigate risks and eradicate injuries. Everyone at National Grid has a part to play in this.

### Outlook

We remain confident that our strategy and new structure will allow National Grid to grow and deliver our commitment to create value for our shareholders. Our relentless focus on safety will continue, our passion around reliability remains and we will maintain our drive on efficiency. Our job at National Grid is to connect people to the energy they use. We hold a privileged position – we sit at the centre of the energy system. That puts us right at the heart of one of the greatest challenges in society today: the creation of new sustainable energy solutions for the future as well as the development of an energy system that can underpin our economic prosperity in the 21st century.

**Sir John Parker**  
Chairman

**Steve Holliday**  
Chief Executive



\* for continuing operations

† excludes the impact of exceptional items, remeasurements and stranded cost recoveries

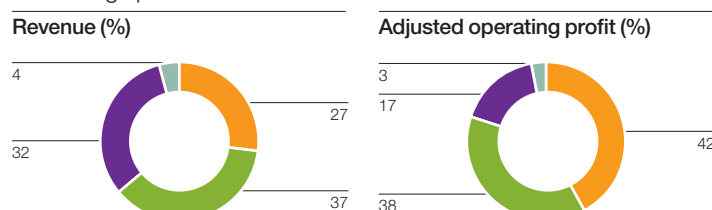
\* rebased for the rights issue



# Our business – 2010/11

## Business analysis 2010/11

Continuing operations



Transmission	Description	Highlights for 2010/11
	We own and operate the electricity transmission network in England and Wales, the gas transmission networks in Great Britain and electricity transmission networks in northeastern US. We are also responsible for the operation of the electricity transmission networks in Scotland.	<ul style="list-style-type: none"> <li>The number of contracted generation agreements met a significant milestone of 32 GW against a target of approximately 29 GW – enough to meet our Gone Green scenario for achieving the 2020 renewable energy targets</li> <li>We launched a public consultation on our approach to undergrounding new electricity transmission lines</li> </ul>
Gas Distribution	Description	Highlights for 2010/11
	We own and operate four of the eight regional gas distribution networks in Great Britain. Our US gas distribution networks provide services to customers across the northeastern US located in territories in upstate New York, New York City, Long Island, Massachusetts, New Hampshire and Rhode Island.	<ul style="list-style-type: none"> <li>Our Gas Distribution lost time injury frequency rate was sustained at 0.21 and our contractor safety improved significantly, more than halving to 0.08</li> <li>Our UK actual gas consumption was 304 TWh in 2010/11 compared with 299 TWh in 2009/10</li> <li>This year we have connected more than 42,000 new US gas customers</li> </ul>
Electricity Distribution & Generation	Description	Highlights for 2010/11
	We own and operate electricity distribution networks in upstate New York, Massachusetts, Rhode Island and New Hampshire. We also maintain and operate the electricity transmission and distribution system on Long Island, owned by the Long Island Power Authority (LIPA).	<ul style="list-style-type: none"> <li>We received an Emergency Response Award from the Edison Electric Institute for our response to a storm in March 2010 which affected around 270,000 LIPA customers</li> <li>The Port Jefferson power station and the generation materials management division, both on Long Island, passed 1,000 days without a lost time incident</li> </ul>
Non-regulated businesses and other	Description	Highlights for 2010/11
	Our non-regulated businesses in the UK are National Grid Metering and OnStream, National Grid Property, our LNG importation facility at the Isle of Grain, BritNed and Xoserve. In the US, our non-regulated businesses include LNG storage and road transportation, transmission pipelines and gas fields.	<ul style="list-style-type: none"> <li>On 1 December 2010, Grain LNG phase III began commercial operation. This was the first operating day for all three phases at Grain which can now deliver approximately 650 GWh per day</li> <li>On 1 April 2011, BritNed successfully achieved 'go live' with a capacity of 1,000 MW along an HVDC interconnector between the UK and the Netherlands</li> </ul>

# Our business – going forward

Following a recent review in response to feedback received from customers, regulators and other stakeholders, April 2011 saw us move to a management structure more closely aligned with local responsibilities. Certain functions will continue to have global responsibilities including finance, human resources, information systems and security, and procurement. In the US, there are now five local teams, each headed by a jurisdictional president: one each for New York, Massachusetts and Rhode Island; one for Long Island where we work with the Long Island Power Authority; and one with responsibility for federal regulatory affairs dealing with the Federal Energy Regulatory Commission (FERC). We have also updated our line of sight framework that reflects the new organisational structure.

## Delivering now...

2010/11 focused on our investment programme, US regulatory processes and changes in UK regulation. We have delivered another year of significant investment in assets and growth in operating profit.

**APRIL 2011**

**The BritNed 1,000 MW HVDC interconnector commences commercial operation**



BritNed, our 260 km electrical interconnector between Great Britain and the Netherlands, went live after three years of construction. The €600 million (£500 million) joint venture, between National Grid and Dutch TenneT, will allow BritNed customers to participate in European and UK markets. This 1,000 MW, two-way electricity high voltage direct current interconnector will make a significant contribution to the security and diversity of electricity supplies in both Great Britain and the Netherlands. It will also help to facilitate further competition by improving connection with Europe. The hall that houses the thyristor valves is approximately 900 m<sup>2</sup> by 20 m tall ■

### **£310 million expansion of Grain LNG opens**

**Grain LNG's phase III capacity expansion opened for commercial operations in December 2010.**

During the 2010/11 winter cold spell, on a number of occasions Grain LNG had the highest output of the country's three LNG terminals. In early January 2011, the 200th LNG vessel was unloaded bringing the amount of energy delivered into the UK gas market through the terminal to almost 200,000 GWh. Capacity is now equivalent to 20% of annual UK gas demand, helping to meet the UK's strategic need for a more diverse energy mix. The Gas Industry Safety Group has recognised the commitment to safety at Grain and we received the outstanding safety performance award for 2010 ■



### **US control centres consolidated**

A state of the art facility in Northborough, Massachusetts now houses New England's transmission, electricity distribution and gas distribution control centres. The new control centres, which opened in May 2010, manage the network safely during planned and unplanned events, ensure the security of the network and minimise customer outages. Consolidation of the control centres was a first step toward standardising and optimising the way we operate and allows for fewer handovers, improved restoration time and increased centralisation of storm management ■



### **US rate cases**

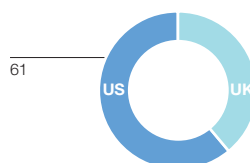
**In the US, we have been through a period of intense regulatory activity as we came to the end of several long-term fixed rate plans. Two major filing outcomes this year were for our Massachusetts gas companies and the Niagara Mohawk electricity business. Through all our rate filings, we try to ensure we have the right cost of service allowances to meet customers' needs. We continue to review the impact of the rate case outcomes and reset our regulatory plan for 2011/12 accordingly ■**



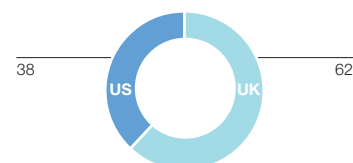


## Geographical analysis 2010/11 Continuing operations

Revenue (%)



Adjusted operating profit (%)



Note: US revenue includes commodity price element which does not contribute to profit.

## OCTOBER 2010

Bringing the energy efficiency message to life

In the US, National Grid teamed up with the city of Worcester in Massachusetts to inspire the community to start using ENERGY STAR® qualified compact fluorescent light bulbs (CFLs). We worked with local artists who painted their interpretation of energy efficiency on five larger than life seven foot CFL replicas, which then went on to be displayed at the local City Hall. CFL light bulbs provide numerous benefits to our customers: they use 75% less energy than standard bulbs and can save around \$40 (£25) per bulb in energy costs over the life of the bulb. They last longer and are environmentally friendly. Studies show that if every home in the US replaced just one light bulb this would save enough energy to light more than 3 million homes for a year ■

## Our customers

**Anticipating the wants and needs of our customers is essential. In the UK, work was completed on our new customer strategy and we reviewed our service skills and their impact on our customer service. In the US, we are consolidating our customer systems which will drive efficiency and also improve customer service. We continue to listen and respond to our customers and act on their feedback ■**



**News that the royal wedding would be taking place in the UK on 29 April meant that essential works to replace the Victorian gas mains around Westminster Abbey had to be brought forward to avoid any disruption. National Grid liaises closely with local stakeholders and considers the situation before starting work on projects. This process includes taking into account major events, such as the royal wedding. The project was planned to begin in spring 2011 but was brought forward to December 2010 as work involved replacing the existing metallic gas main with new hard wearing plastic pipe. The City of Westminster is the site of the world's first gas supply and the new pipe will ensure people in the area continue to enjoy a safe, secure and reliable gas supply in future years ■**

## MARCH 2011

Helping to ensure the royal wedding went smoothly



## JUNE 2010

First rate based utility owned solar facility successfully commissioned in New England



In the US, we successfully commissioned in June 2010, the first rate based utility owned solar generation project in the state of Massachusetts. Three more facilities were completed by December and the final solar site in Dorchester, Massachusetts is expected to be completed by autumn 2011. Combined, the four completed sites will generate a total of 3.4 MW of solar power currently making us the largest owner of solar generation in the state. In addition, the power generated will help eliminate a total of about 2,000 US tons of CO<sub>2</sub> per year. This is enough to supply power to approximately 700 US homes annually ■

## ...and in the future.

We are facing a number of challenging opportunities for the future of the energy industry. National Grid is at the heart of securing energy supplies for future generations.

### 2010–2018

First phase of London cable tunnels project commences



In 2010, we began our London cable tunnels project, a programme of major work to construct deep tunnels beneath the capital, forming part of our investment plan. Building overhead lines or burying cables to deliver the supply is not practical in an already congested area, so we are constructing a series of deep tunnels that will house new 400 kV cables to meet rising demand. The first two tunnels will connect the existing substations at Hackney, St John's Wood, Willesden and Wimbledon. This is a huge programme with the first phase alone taking eight years. Sustainability is also an important part of the programme. We will generate around 2.4 million tonnes of mostly clay spoil, and we are finding methods of transporting this away from the site in the most sustainable way ■

### Reorganisation of National Grid

**Since 4 April 2011, we have been operating under a new organisational structure and modified operating model that explicitly organises our business on a regional basis – UK and US. It will allow us to deliver US cost reductions of \$200m. Going forward, our new regional organisation will help us to overcome the different challenges that our businesses face, while ensuring a clear link with all our stakeholders. This will enable us to continue to provide excellent service to our customers and value to our shareholders ■**

### Setting standards with greener heat

We are reducing our carbon footprint by changing the way liquefied natural gas (LNG) is converted back to its gaseous form to supply the national gas transmission system. For the conversion process, LNG needs to be heated from  $-161^{\circ}\text{C}$  ( $-258^{\circ}\text{F}$ ) and, until now, gas was used as a fuel for this process. By late 2011, National Grid and E.ON will link two process plants – Grain LNG and Grain power station – with twin pipes so surplus heat from one becomes the fuel for the other. The heat pipe means that Grain LNG will contribute towards our target of reducing our emissions of greenhouse gases by 80% ■



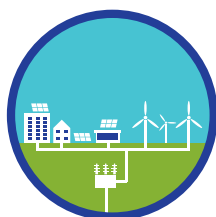
### 2011–2012

Gas Distribution front office implementation

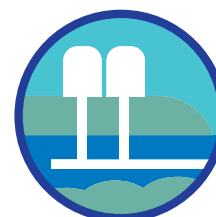


In the UK, we are undertaking a significant investment to replace our IT applications used for asset management. Following the first release in October 2010, the next two stages of implementation will continue throughout 2011/12 and include the final roll out to the remaining 1,000 emergency response staff, and the introduction of a new integrated customer system into our call centres. These investments will make significant improvements to how we manage our asset data. In the US, we have been able to carry on the momentum from these UK efforts. Our US business has begun preparations for consolidating its asset and work management systems onto a single platform ■





**Renewable energy**  
Renewable energy comes from natural resources including sunlight, wind, rain, tides and geothermal heat – which naturally replenish. Renewable energy can be used again and again.



**Carbon capture and storage (CCS)**  
CCS involves the removal and transportation of CO<sub>2</sub> produced during electricity generation to suitable storage sites. It will help in meeting the UK's climate change targets by decarbonising electricity generation.

## UK and US offshore wind projects

**In November 2010, we signed our largest ever UK connection contract for the full 7.2 GW of capacity for East Anglia Offshore Wind Ltd. The project will commission wind turbines in 10 stages between 2015 and 2021. Of the total capacity, 6.6 GW will be delivered before 2020.**

Compared to currently completed power projects worldwide, the 7.2 GW East Anglia offshore wind farm would be the sixth largest power station, and the second largest non hydro project, in the world. In the US, we received regulatory approval for power purchase agreements for two unique offshore wind generating projects. Deepwater Wind is a 28.8 MW project off the coast of Rhode Island and is intended to demonstrate the technology for installation of wind turbines in relatively deep offshore waters. Off the coast of Massachusetts, a second contract is for half the output from Cape Wind, a 468 MW project located on a relatively shallow shoal. These projects have established us as a lead utility supporting the development of renewable energy in the US ■

## UK regulation

**In the UK, we remain positive about the proposed new system of regulation, RIIO (revenue = incentives + innovation + outputs), which will be used in UK price controls for Transmission and Gas Distribution from April 2013. Our networks will need to change substantially in the next 20 years, both in terms of their configuration and in the way that they operate in real time. We are in the early stages of the process, but we are pleased to see that Ofgem has focused on innovation and incentives and is aware of the need to provide adequate returns and cash flow ■**

## 2020

Biogas has potential for future energy needs



**The first biogas production facility built for injecting gas into the UK gas network was formally launched in October 2010. Going forward, Adnams Bio Energy Ltd (ABE), in partnership with National Grid and British Gas, aims to generate up to 4.8 GWh per year – enough to heat around 235 family homes for a year or run an average family car for 4 million miles. In the future, up to 100% of the gas produced at the ABE facility will be injected into the gas network for use by customers in their homes and businesses. A study by National Grid shows that biomethane has the potential to account for 15% of domestic gas consumption by 2020 ■**

## Leading edge CCS demonstration projects

National Grid is keen to support early carbon capture and storage demonstration projects, as these will help establish the technical and economic basis under which thermal generation can remain part of the energy mix in the UK. During 2010, we commissioned the design and construction of a test rig in Spadeadam in Cumbria, and conducted a range of CO<sub>2</sub> decompression tests. The tests are the first of their type in the world and help establish safety standards. We will continue our work in the area ■

## New high voltage direct current link

The western high voltage direct current link (HVDC) is being jointly developed by National Grid and Scottish Power's transmission business. It is a major electricity transmission project as we propose to develop a subsea HVDC cable on the western side of the UK, which will connect Scotland with England and Wales. While providing much needed additional capacity on the Great Britain transmission system, the HVDC cable minimises the disturbance to onshore communities and will support the continued growth and expansion of renewable energy as the UK works towards becoming a low carbon economy. Upon completion, scheduled for late 2015, the link will transfer around 2,000 MW of power over a distance of more than 400 km ■

## 2010 ONWARDS

City Year project in the UK and US



Investing in the communities we serve remains a high priority for us. In September 2010, we joined City Year London. City Year is a project that has a proven track record of improving young lives and 2010/11 is City Year London's first programme. Aged between 18 and 25, City Year London's Corps members are mentors, tutors and role models in local schools and communities. Our participation follows in the footsteps of our longer standing successful partnership with City Year US. It offers us the opportunity to be part of something that not only has a huge potential to make a difference to the lives of children and young people, but will also enhance our schools and community engagement programme ■

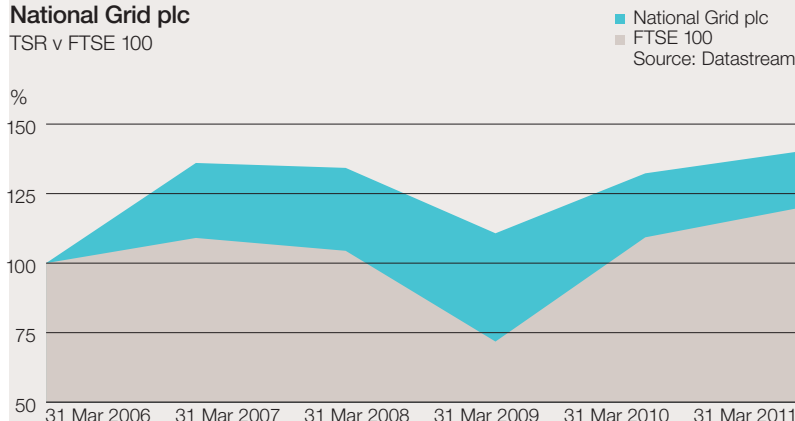
# Your shares

## Performance graph

The graph below represents the comparative TSR performance of the Company from 31 March 2006 to 31 March 2011

### National Grid plc

TSR v FTSE 100



**8%**

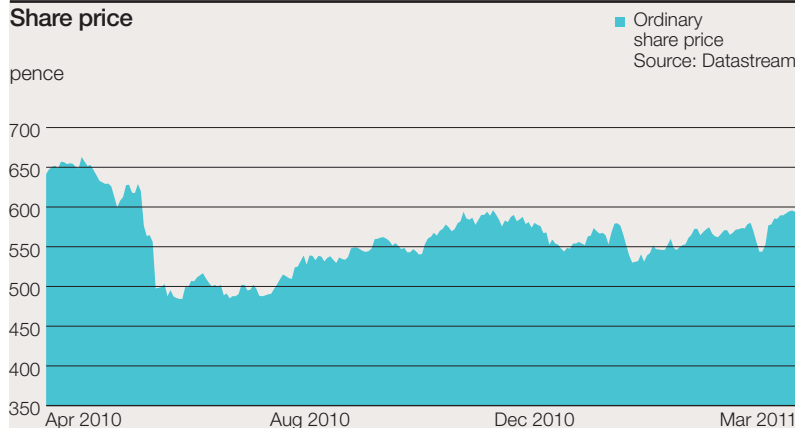
Targeted dividend increase until 2011/12

This Performance Summary is provided for information only, contains forward-looking statements, and is not intended to be a substitute for reading the Annual Report and Accounts 2010/11 (ARA). In particular, this Performance Summary does not constitute summary financial statements and does not contain sufficient information to allow for as full an understanding of the results and state of affairs of the Company, including the principal risks and uncertainties facing National Grid, as would be provided by the full ARA. Copies of the full ARA 2010/11 are available online at [www.nationalgrid.com](http://www.nationalgrid.com) or from Capita Registrars.

## Share price

The following graph represents the movement of National Grid's share price during 2010/11

### Share price



**594p**

The closing share price at 31 March 2011

## For queries about ordinary shares:

### Capita Registrars



0871 402 3344  
(from outside UK: +44 20 7098 1198)  
(textphone: 18001 0870 242 2379)

Lines are open 8.30am to 5.30pm Monday to Friday.  
Calls cost 8p per minute plus network extras.



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[www.nationalgridshareholders.com](http://www.nationalgridshareholders.com)



National Grid Share Register,  
Capita Registrars, The Registry,  
34 Beckenham Road, Beckenham,  
Kent BR3 4TU

## For queries about American Depositary Shares (ADS or ADR):

### The Bank of New York Mellon



1-800-466-7215  
(from outside the US: +1-201-680-6825)



[shrrelations@bnymellon.com](mailto:shrrelations@bnymellon.com)  
[www.bnymellon.com/shareowner](http://www.bnymellon.com/shareowner)



The Bank of New York Mellon  
Shareholders Correspondence  
PO Box 358516, Pittsburgh,  
PA 15252-8516



Information on the Directors can be found online at  
[www.nationalgrid.com](http://www.nationalgrid.com)

Further information on the share price and  
interactive tools can be found online at  
[www.nationalgrid.com](http://www.nationalgrid.com)

# Financial calendar

The following dates have been announced or are indicative of future dates:

<b>1 June 2011</b>	Ordinary shares go ex-dividend for 2010/11
<b>3 June 2011</b>	Record date for 2010/11 final dividend
<b>8 June 2011</b>	Scrip reference price announced
<b>20 July 2011</b>	Scrip election date
<b>25 July 2011</b>	2011 AGM and interim management statement
<b>17 August 2011</b>	2010/11 final dividend paid to qualifying ordinary shareholders
<b>17 November 2011</b>	2011/12 half year results
<b>30 November 2011</b>	Ordinary shares go ex-dividend
<b>2 December 2011</b>	Record date for 2011/12 interim dividend
<b>18 January 2012</b>	2011/12 interim dividend paid to qualifying ordinary shareholders
<b>Jan/Feb 2012</b>	Interim management statement
<b>May 2012</b>	2011/12 preliminary results

## Shareholder networking

The shareholder networking programme, which is normally run twice a year with each event over two days, includes visits to UK operational sites and presentations by senior managers and employees. The costs of the programme (including shareholder travel to and from the event) are paid for by the Company. Open to UK resident shareholders, participation is by application and selection by ballot, with priority given to those who have not recently attended.

If you would like to take part, please apply online [www.nationalgrid.com/corporate/Investor+Relations/ShareholderServices/ShareholderNetworking/](http://www.nationalgrid.com/corporate/Investor+Relations/ShareholderServices/ShareholderNetworking/)

Only those successful in the ballot will be contacted.

There is also the opportunity to apply in person at the AGM.