nationalgrid

Annual Report and Accounts 2020/21

Bring Energy to Life

PRINCIPAL PARTNER
UN CLIMATE CHANGE CONFERENCE UK 2021
IN PARTNERSHIP WITH ITALY

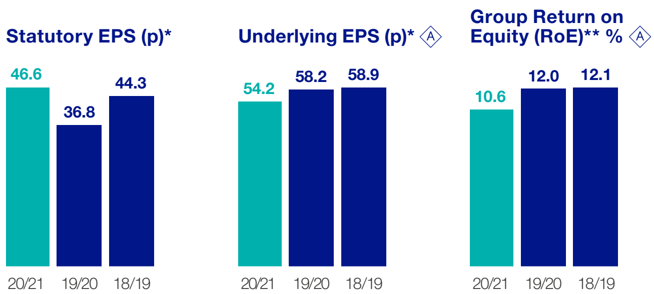
Bring Energy to Life

National Grid operates at the heart of the energy system, connecting millions of people safely, reliably and efficiently to the energy they use every day.

Highlights

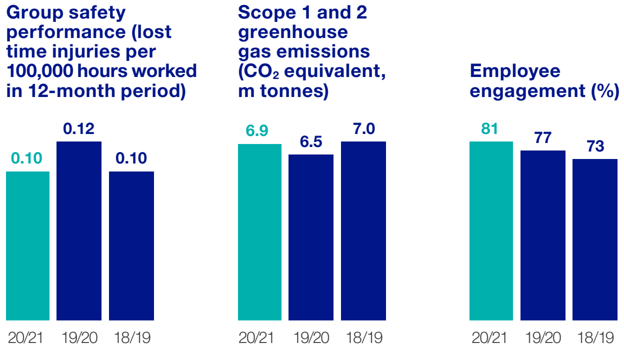
We have continued to make strategic and operational progress while maintaining excellent safety levels across all our networks. We have retained a focus on our environmental sustainability record and employee engagement.

Group financial highlights



* From continuing operations.
** Group RoE in 2018/19 and 2019/20 has been recalculated to reflect the revision to decrease the comparative goodwill balances (see note 1F on page 137 for details).

Group operational highlights



Further reading

Online report
The PDF of our Annual Report and Accounts 2020/21 includes a full search facility. You can find the document by visiting the 'About us' section at nationalgrid.com/about-us/annual-report-and-accounts.

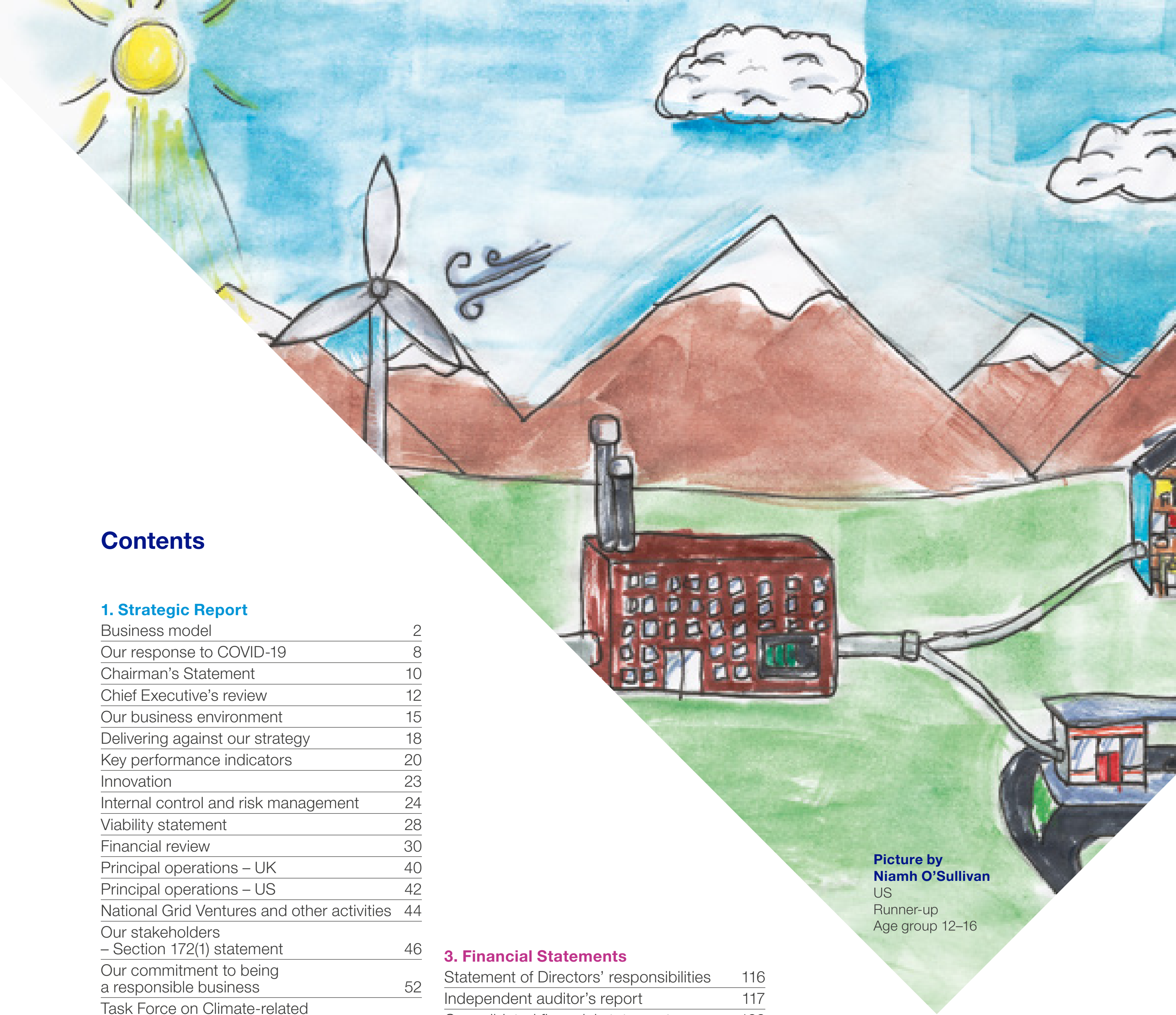
QR codes
Throughout the report there are QR codes that you can scan to easily view content online. Simply open your camera app on your smartphone device to scan the code.

More detail
Throughout this report you can find links to further detail within this document.

Responsible business
National Grid has published its first annual Responsible Business Report (RBR). The RBR reports progress on the responsible business agenda, including against the commitments made in our Responsible Business Charter (RBC). You can find both documents by visiting nationalgrid.com/responsibility.

Front cover
We're excited to be a principal partner for COP26. COP stands for Conference of the Parties. We're getting behind the conference because it's a unique chance to call for a more ambitious action towards a clean energy future.

For more information
nationalgrid.com/responsibility/environment/cop26



Picture by
Niamh O'Sullivan
US
Runner-up
Age group 12–16

Contents

Reporting currency

Our financial results are reported in sterling. We convert our US business results at the weighted average exchange rate during the year, which for 2020/21 was $1.34 to £1 (2019/20: $1.29 to £1).

Alternative performance measures Ⓐ

In addition to IFRS figures, management also use a number of 'alternative measures' to assess performance. Definitions and reconciliations to statutory financial information can be found on pages 250 – 259. These measures are highlighted with the symbol above.

Business model

Our business at a glance

National Grid plc is one of the world's largest investor-owned energy utilities, committed to delivering electricity and gas safely, reliably and efficiently to the customers and communities we serve.

Key:
- ◆ UK Electricity Transmission (including ESO)
- ◆ UK Gas Transmission
- ◆ US Regulated (New England and New York)
- ◆ National Grid Ventures and other activities

Statutory operating profit (%)

Underlying operating profit (%) Ⓐ

RAV, rate base and other assets (%) Ⓐ

National Grid owns a range of high-quality, long-term assets with low commercial risk profiles, typically supported by long-term contracts or stable regulatory arrangements. Our current operating model comprises our core regulated businesses, being UK Electricity Transmission, including the UK Electricity System Operator, UK Gas Transmission and our US Regulated business, which together generated over 90% of our operating profits this year. Alongside these, we also own a diverse and growing portfolio of commercial energy operations which form our National Grid Ventures business, and are reported on together with certain other non-core activities of the Group.

Our new operating model

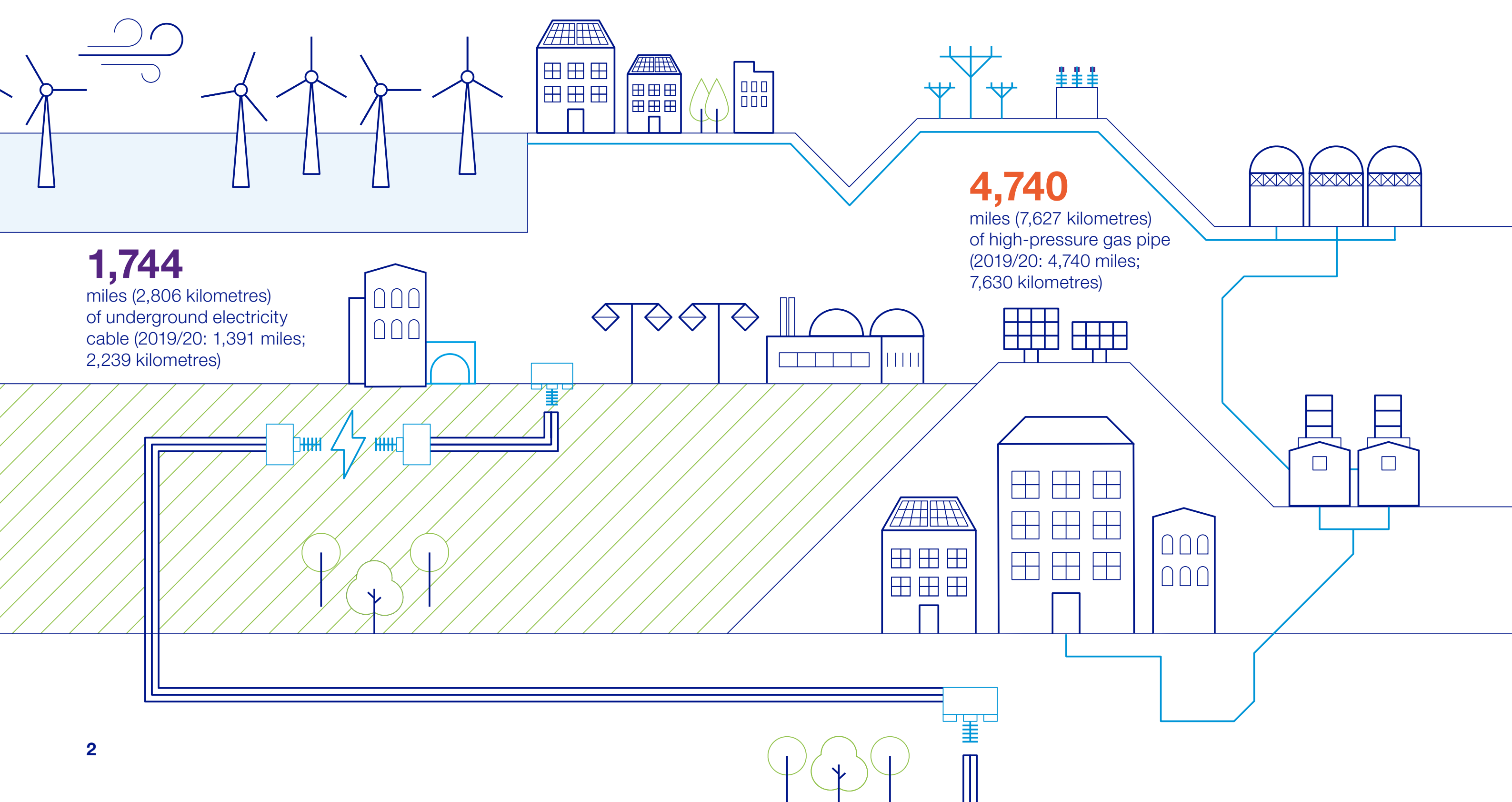
National Grid's vision is to be at the heart of a clean, fair and affordable energy future in an industry sector where the pace of change is accelerating with increasing focus on decarbonisation, digitalisation and decentralisation. Faced with this, and in order to ensure we can effectively and efficiently deliver the financial, customer and regulatory outcomes that will help us on our journey towards net zero, building on the opportunities offered by digitalisation, from 1 April 2021, we are changing our operating model as a company, alongside the changes we are making to our culture as described on page 18.

The building blocks of this new operating model will be six business units, being:
- UK Electricity Transmission;
- the UK Electricity System Operator;
- UK Gas Transmission;
- New England;
- New York; and
- National Grid Ventures and other activities

which will each be run as end-to-end enterprises within the Group portfolio.

On 18 March 2021, National Grid announced it had agreed to buy Western Power Distribution (WPD) from PPL Corporation. At the same time, and conditional on the WPD Acquisition, we agreed to sell our Rhode Island electricity and gas distribution business to PPL and we announced that we will be initiating a process for the sale of a majority stake in our UK Gas Transmission and metering business later this year.

Conditional on completion of the purchase, WPD will form an additional UK business unit.



UK Electricity Transmission

Electricity Transmission

We own the high-voltage electricity transmission (ET) network in England and Wales. We are responsible for ensuring electricity is transported safely and efficiently from where it is produced, reaching homes and businesses reliably. We also facilitate the connection of assets to the transmission system.

Electricity System Operator

Since 1 April 2019, the Electricity System Operator (ESO) operates as a separate company within National Grid. We are responsible for making sure supply and demand of electricity is balanced in real time across Great Britain (GB). While we operate as the ESO across GB, we do not own the transmission assets in Scotland.

Although the ESO is legally separate from ET, for 2020/21, its results are still presented to the Board as part of the UK ET segment.

4,496

miles (7,236 kilometres) of overhead electricity lines (2019/20: 4,481 miles; 7,212 kilometres)

UK Gas Transmission

Our UK Gas Transmission (GT) business comprises both the gas transmission assets and an integrated gas system operator.

We own and operate the high-pressure gas transmission network in Great Britain. We are responsible for making sure the country's gas is transported safely and efficiently from where it is produced to where it is consumed.

As the Gas System Operator, we are responsible for ensuring that supply and demand are balanced in real time on a day-to-day basis.

On 18 March 2021, we announced that we will be initiating a sale process later this year for a majority stake in this business (including our UK metering business which currently forms part of NGV).

8,972

miles (14,439 kilometres) of electricity transmission overhead lines (2019/20: 9,109 miles; 14,659 kilometres)

73,010

miles (117,498 kilometres) of electricity distribution circuit miles (2019/20: 73,004 miles; 117,488 kilometres)

US Regulated

New England

Electricity

We own and operate transmission facilities and distribution networks across Massachusetts, New Hampshire, Vermont and Rhode Island. Conditional on completion of the WPD Acquisition and certain regulatory approvals, we have agreed to sell our Rhode Island electricity transmission and distribution business to PPL. The sale is expected to complete in the first quarter of 2022.

Gas

We own and operate gas distribution networks across Massachusetts and Rhode Island. We have also agreed to sell our Rhode Island gas distribution business to PPL.

New York

Electricity

We own and operate transmission facilities and distribution networks across upstate New York. We also own and operate electricity generation facilities on Long Island, although under the new operating model they form part of NGV.

Gas

We own and operate gas distribution networks across upstate New York, in New York City and on Long Island.

National Grid Ventures and other activities

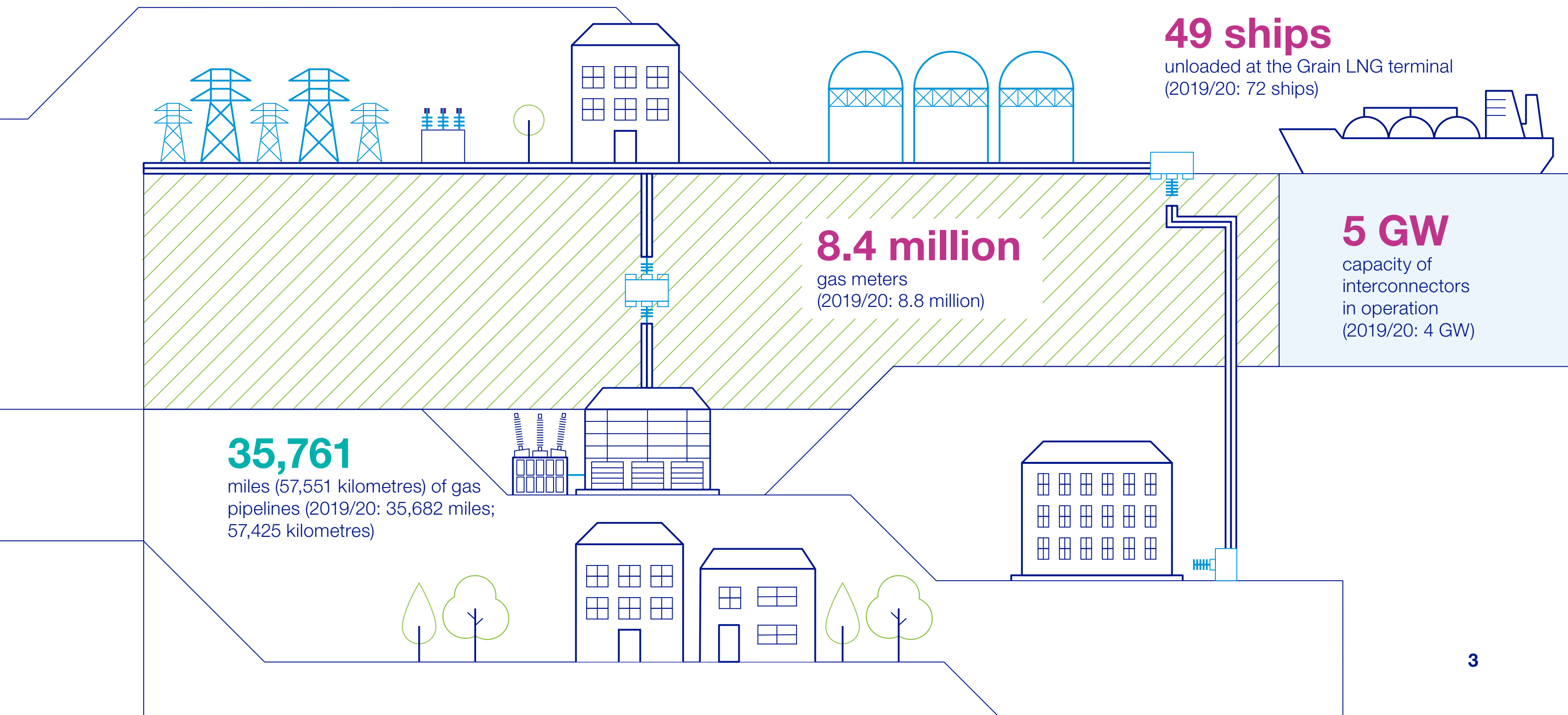
National Grid Ventures (NGV) manages our diverse portfolio of energy businesses that are complementary to our core regulated operations. This operating segment represents our main strategic growth area outside our regulated core business, in competitive markets across the US and the UK. The business comprises commercial operations in energy metering, electricity interconnectors, renewables development and the storage of liquefied natural gas (LNG) in the UK.

In the US, NGV includes National Grid Renewables (which includes the renewables development company formerly known as Geronimo), a leading wind and solar developer in North America, and partners with companies including NextEra, SunRun and RWE to develop and own high-quality renewable energy assets. It also owns non-controlling stakes in joint ventures including New York Transco and the Millennium Pipeline Company.

Our other activities that do not form part of any of our core regulated businesses or NGV, primarily relate to our UK property business together with insurance and corporate activities in the UK and US, and the Group's investments in technology and innovation companies, through National Grid Partners (NGP).

49 ships

unloaded at the Grain LNG terminal (2019/20: 72 ships)



Business model continued

How we operate

We rely on our internal resources and our strong relationships which we use to do business, drawing on our technical expertise and culture in order to deliver value for our stakeholders and for wider society.

What we rely on

The key internal resources that we rely on to do business are:

- **our physical assets that move the energy;**
- **appropriate funding that allows us to invest in our colleagues and assets; and**
- **our talented colleagues who ensure energy is moved efficiently and reliably.**

We also rely on maintaining strong relationships with a number of key external stakeholder groups to ensure we best meet their needs and maintain our licence to operate (see pages 46 – 51).

Internal resources

Physical assets

We own electricity and gas networks that transmit energy over long distances from where it is produced. In the US, we also distribute it locally to where it is consumed. These networks are built to last for many decades. Such networks account for the vast majority of our asset base. We also own four subsea electricity interconnectors, with two further subsea cables under construction as well as LNG importation facilities.

Funding

We fund our business through a combination of shareholder equity and long- and short-term debt. We maintain an appropriate mix of the two and manage financial risks prudently.

Colleagues

Our highly skilled, dedicated colleagues have a strong public service ethos. They manage and maintain the physical energy infrastructure, and assist and develop the many stakeholder relationships that are crucial to the Company's success.

As we support the changes needed to build a net zero energy system, we are providing employment opportunities and supporting our colleagues to build the skills necessary to support these changes. By attracting and retaining the people capable of supporting the journey to net zero in the energy sector, we can help the places where we operate reach their emissions targets.

Strong relationships

Customers

In the UK we do not own the energy that flows through our electricity cables and gas pipes. This energy is owned by our customers, such as electricity generators and gas shippers. These industrial customers, together with domestic consumers through a small portion of their energy bills, pay to use our networks. In the US, we have almost seven million residential and commercial accounts.

Contractors and suppliers

We work in partnership with our supply chain, which has complementary experience, skillsets and resources. We agree mutually beneficial contractual arrangements and, wherever possible, leverage economies of scale and use sustainable and global sourcing opportunities.

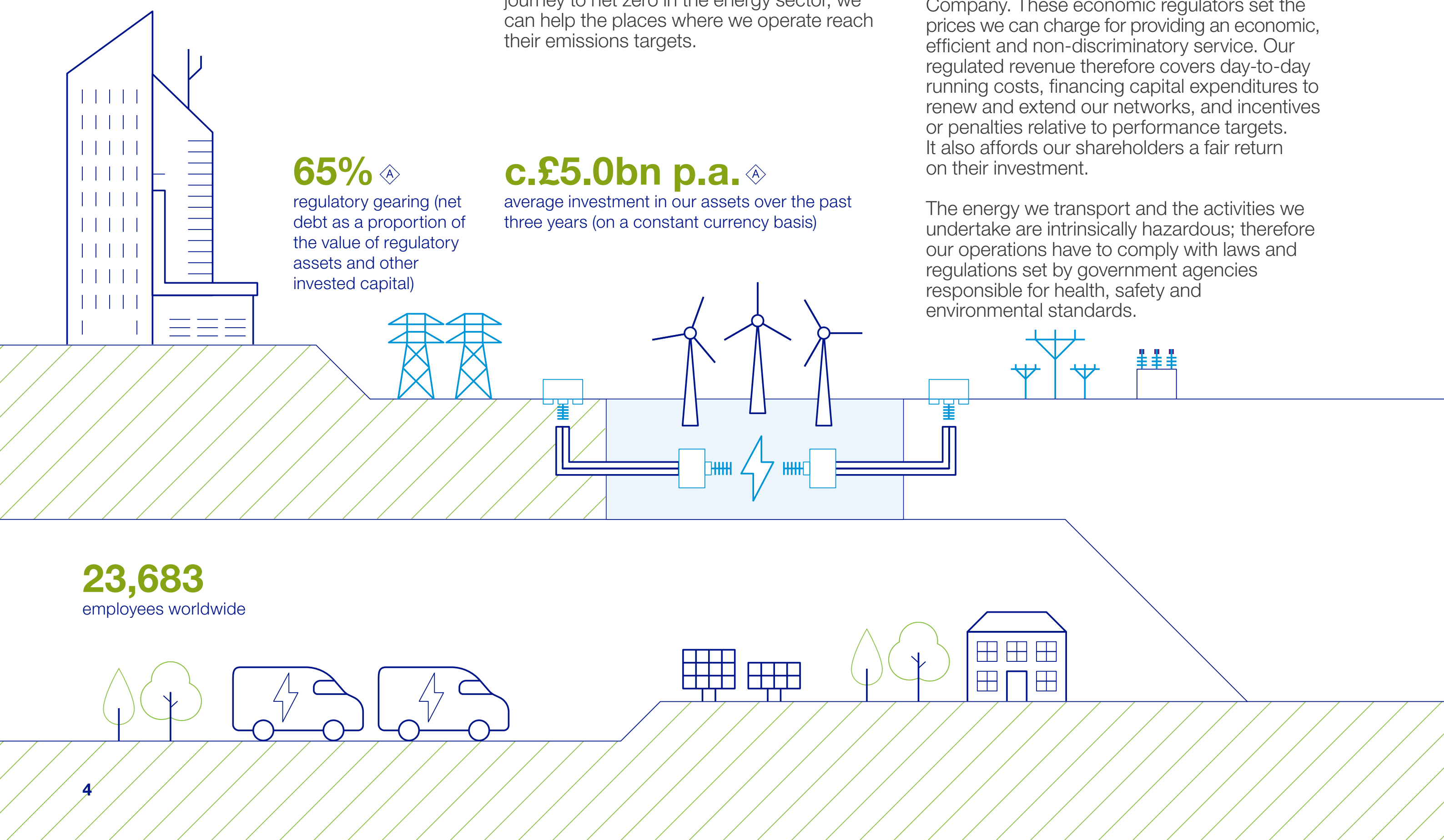
Communities and governments

The societal impact of our activities means that a range of stakeholders have a legitimate interest in and influence on the work we do. These include national and regional governments, local communities, our supply chain, and business and domestic consumers of the energy we transport.

Economic, health, safety and environmental regulators

We are subject to economic regulation by bodies that are entirely independent of the Company. These economic regulators set the prices we can charge for providing an economic, efficient and non-discriminatory service. Our regulated revenue therefore covers day-to-day running costs, financing capital expenditures to renew and extend our networks, and incentives or penalties relative to performance targets. It also affords our shareholders a fair return on their investment.

The energy we transport and the activities we undertake are intrinsically hazardous; therefore our operations have to comply with laws and regulations set by government agencies responsible for health, safety and environmental standards.



65% Ⓐ
regulatory gearing (net debt as a proportion of the value of regulatory assets and other invested capital)

c.£5.0bn p.a. Ⓐ
average investment in our assets over the past three years (on a constant currency basis)

23,683
employees worldwide

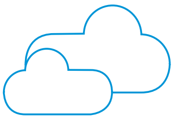
How we do business

We combine these internal resources and strong relationships with our technical expertise to achieve our purpose and strategic objectives.

We do all of this in accordance with our culture and values, which guide everything that we do.

Our strategy is designed to deliver our vision, while being supported by robust governance and risk management processes.

Our innovation activities are focused on future-proofing the business for our customers as the energy landscape changes.



5.6%

Asset growth 2020/21

Our technical expertise

Over the many decades in which we have played a vital role connecting people to the energy they use, National Grid has built safe and reliable networks. We continue in our efforts to develop a well-respected and trusted reputation for engineering excellence.

We combine our extensive skills, knowledge and capabilities with innovation to ensure our core competencies continuously create value for shareholders and wider stakeholders alike.

We are recognised for our excellence in:

Asset management

We invest in and maintain our assets across their life as cost-effectively as possible.

Our focus ensures efficient management of our assets across their lifetime.

Engineering

The skills of our engineers are vital in delivering safe, efficient, reliable and sustainable performance for all our businesses. Our colleagues strive to:

- find practical and innovative solutions to complex problems;
- employ risk-based decision-making; and
- adopt common approaches and continuous improvements.

Our engineering expertise supports the delivery of a reliable network.

Capital delivery

We add value for our stakeholders by ensuring safe and effective delivery of large and complex infrastructure projects, ranging from large portfolios of smaller works to more substantial stand-alone projects.

Our culture

National Grid's culture is the values, beliefs and behaviours that characterise our Company and guide our practices.

As the energy transition accelerates, our strategic priorities will determine how we respond and shape our business over the next decade. To ensure success, we are working to change our current culture to one with a greater sense of purpose, strengthening our focus on results and performance, with leaders who empower, steer and act decisively.

We maintain high standards of ethical business. We also promote the right behaviours that are aligned with our values and culture by recognising our employees through a company-wide reward system that supports both what they achieve and how they have delivered their achievements.

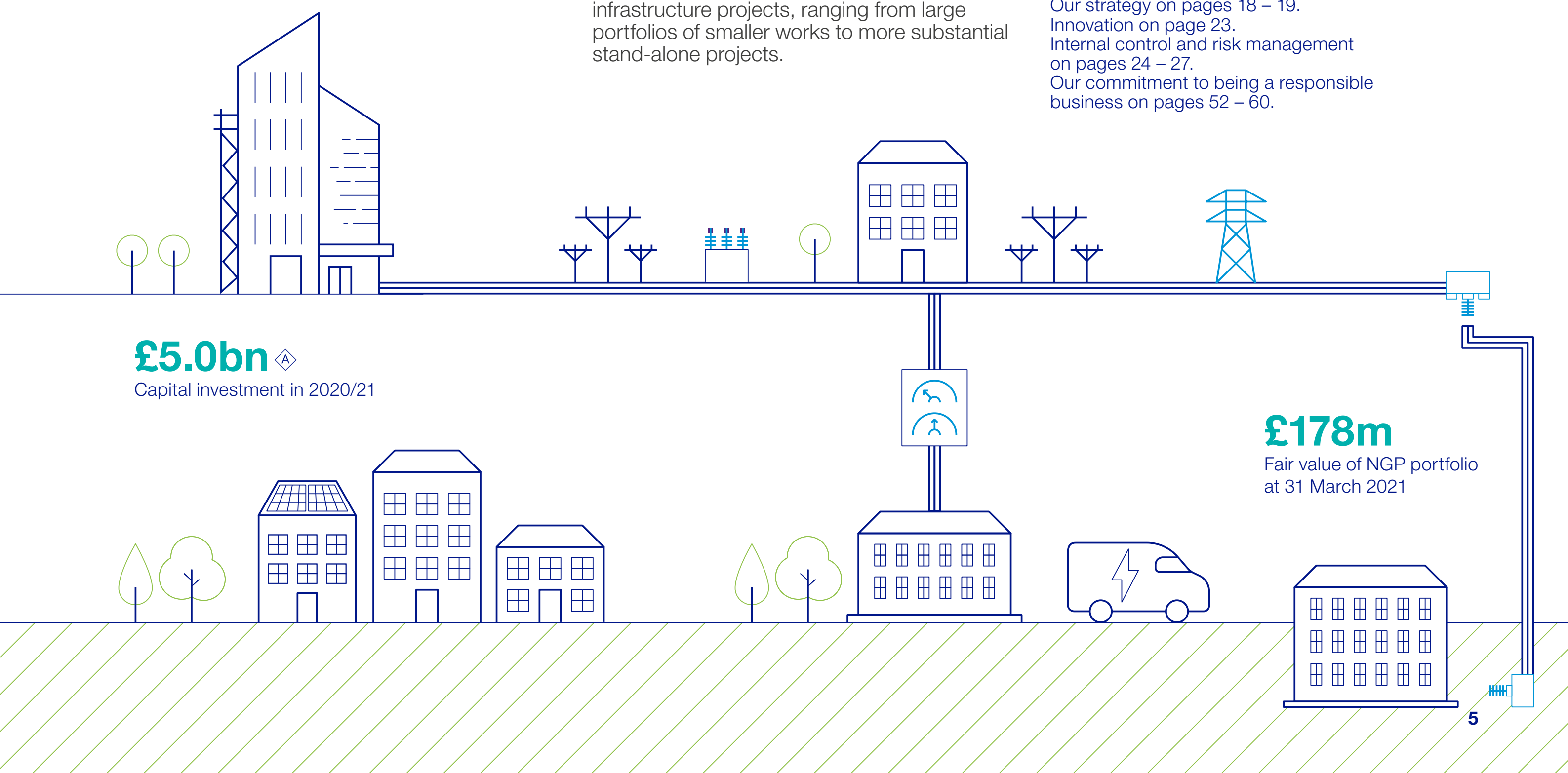
Strategy and risk management

As the energy industry continues its transition to a cleaner future, we have evolved our strategy so that it clearly articulates our priorities, while positioning our business to continue to deliver long-term economic benefits in the regions in which we operate.

We have well-established governance structures that include comprehensive risk management, strong controls and financial discipline.

Further reading

Our strategy on pages 18 – 19.
Innovation on page 23.
Internal control and risk management on pages 24 – 27.
Our commitment to being a responsible business on pages 52 – 60.



£5.0bn

Capital investment in 2020/21

£178m

Fair value of NGP portfolio at 31 March 2021

Business model continued

How we operate continued

We provide the energy systems that help economies grow in a sustainable, affordable and reliable way. We continue to work with partners and customers on the technologies required to make net zero a reality.

The value we create

We deliver value for our stakeholders, which include our customers, as well as financial value for shareholders, by:

- operating within our regulatory frameworks, and thereby being efficient and compliant;
- performing well against our regulatory incentives, delivering customer benefits and good returns;
- managing our cash flow requirements and securing low-cost funding; and
- maintaining a disciplined approach to investment in our networks and in development opportunities that are complementary to our core businesses.

Investors

We aim to be a low-risk investment proposition, focused on generating shareholder value through dividends, supported by asset growth from investing in essential assets under primarily regulated market conditions, and servicing long-term sustainable consumer-led demands.

10.6% Ⓐ

Group Return on Equity 2020/21

For stakeholders and wider society

Our colleagues

We seek to create an environment in which our colleagues can make a positive contribution, develop their careers and reach their full potential.

Customers

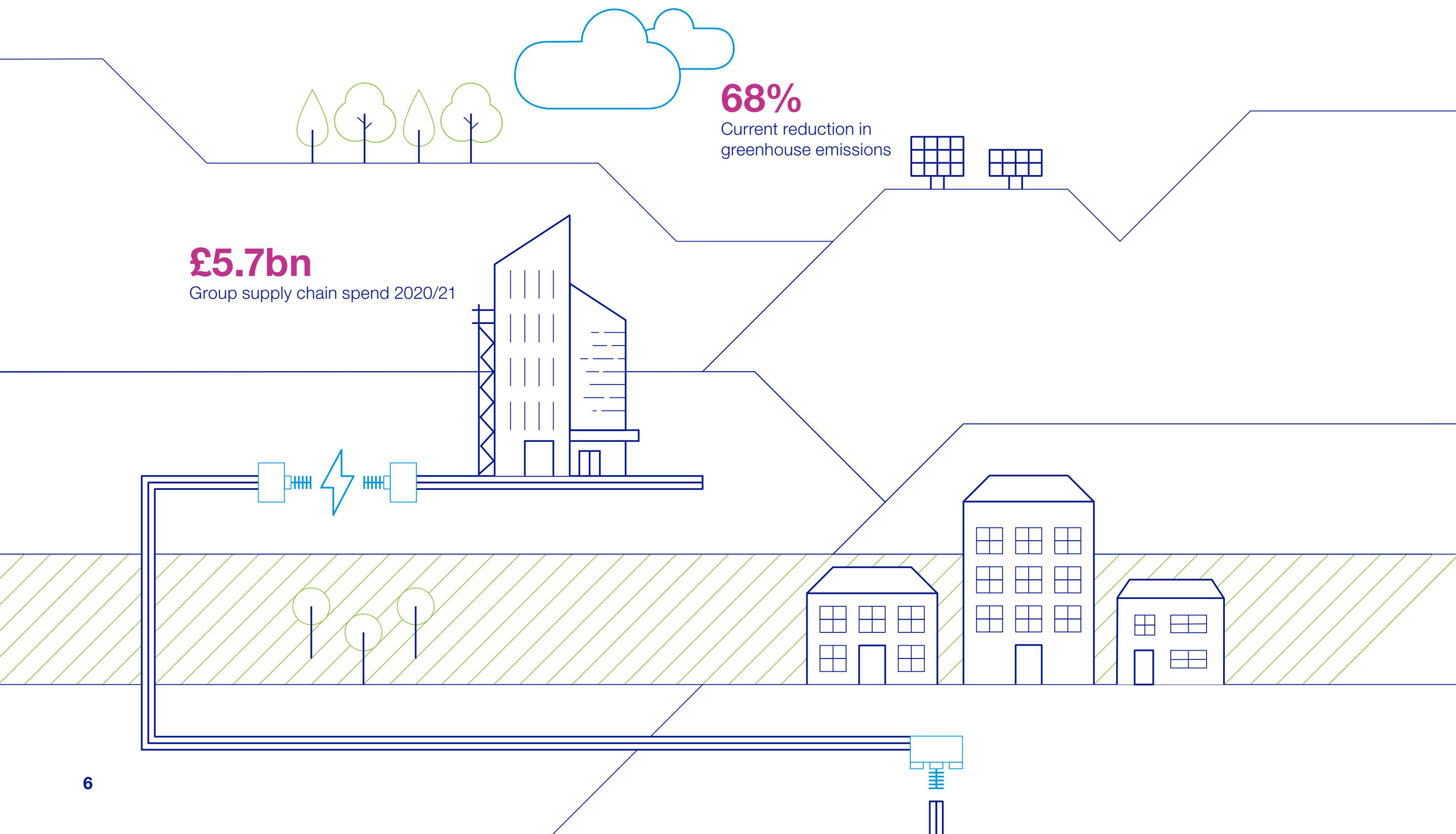
By delivering the energy they need and dealing with them in a transparent and responsive manner, we seek to build trusted relationships with our customers as we deliver services to them.

Contractors and suppliers

We maintain responsible and efficient supply chains in which our interests and those of our suppliers are aligned with the interests of customers.

Communities and governments

We help national and regional governments formulate and deliver their energy policies and commitments. The taxes we pay help fund essential public services. We have an important role to play in sustainability, enabling the transition to a low-carbon future.



Economic, health, safety and environmental regulators

Through constructive, transparent engagement and consistent, reliable delivery of our commitments, we build trust with our regulators.

Financial value

The chart below describes how our businesses create financial value. Further detail can be found in our financial review on pages 30 – 39.

1

Revenue and profits

The vast majority of our revenues are set in accordance with our regulatory agreements (see pages 30 – 39), and are calculated based on a number of factors including investment in network assets, performance against incentives, allowed returns on equity and cost of debt, and customer satisfaction.

2

Cash flows

Our ability to convert revenue to profit and cash is important. By managing our operations efficiently, safely and for the long term, we generate substantial cash flows. Coupled with long-term debt financing, as well as additional capital generated through the take-up of the shareholder scrip dividend option during periods of higher investment, we are able to invest in growing our asset base and fund our dividends.

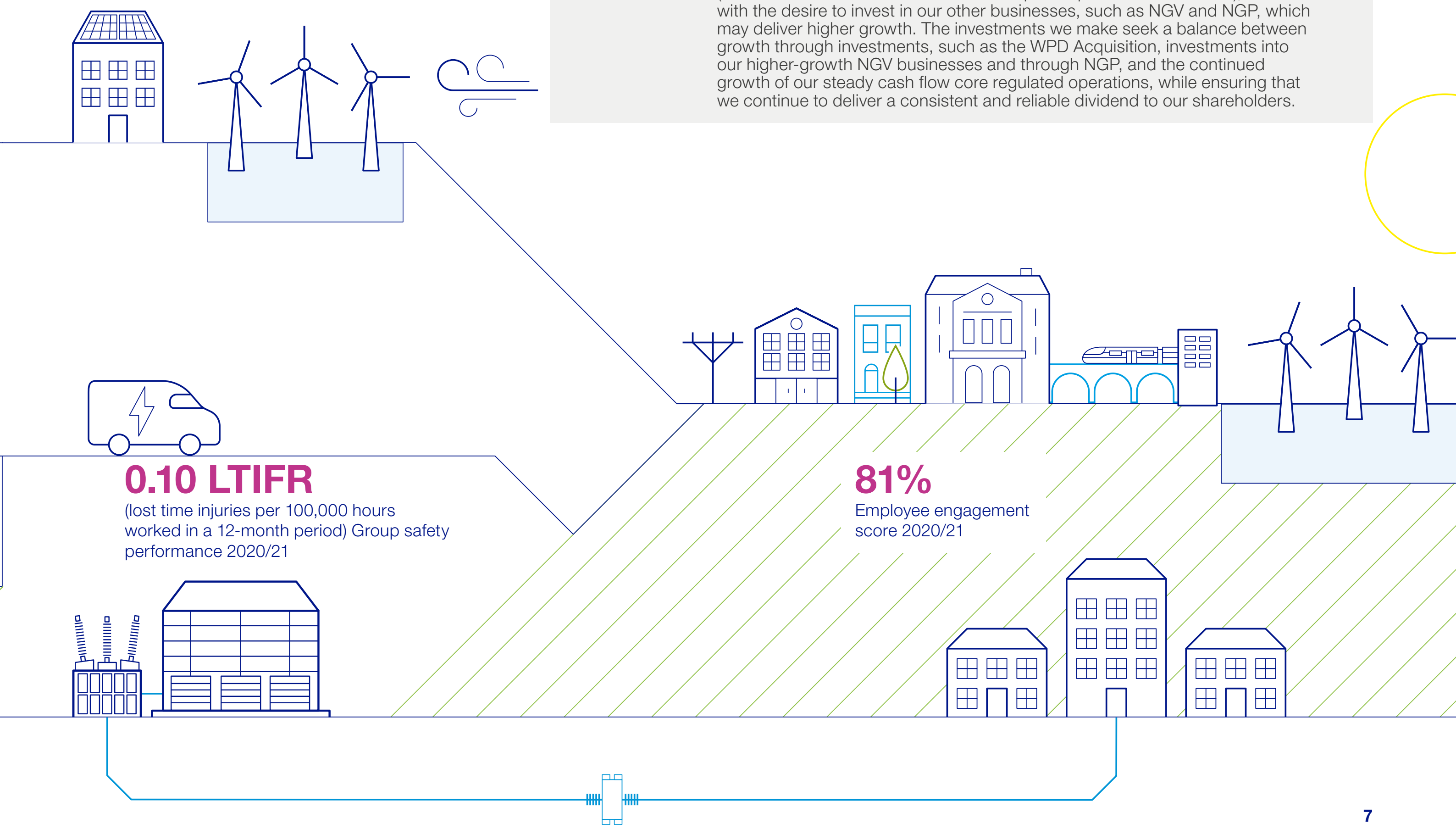
3

Investment

We invest efficiently in our networks to deliver strong and sustainable growth in our regulated asset base over the long term. We continually assess, monitor and challenge investment decisions so we can continue to deliver safe, reliable and cost-effective networks.

Capital allocation

Our capital allocation is determined by the need to deliver the investments and outputs required under our regulatory frameworks in the UK and US (which accounted for over 90% of our capital expenditure in 2020/21), balanced with the desire to invest in our other businesses, such as NGV and NGP, which may deliver higher growth. The investments we make seek a balance between growth through investments, such as the WPD Acquisition, investments into our higher-growth NGV businesses and through NGP, and the continued growth of our steady cash flow core regulated operations, while ensuring that we continue to deliver a consistent and reliable dividend to our shareholders.



0.10 LTIFR

(lost time injuries per 100,000 hours worked in a 12-month period) Group safety performance 2020/21

81%

Employee engagement score 2020/21

Our response to COVID-19

Throughout the financial year, we have continued to prioritise our stakeholders, maintain reliable and safe networks and protect against financial implications due to COVID-19.

Considering our stakeholders

The COVID-19 pandemic has impacted all of our stakeholders since it began in March 2020. We have sought to work with them to address the challenges they faced as these have evolved over the last year.

Further reading

our section 172 statement detailed summary pages 46 – 51

Our commitment to being a responsible business is central to the way in which we operate. This has been the governing principle behind our Board's response to the COVID-19 pandemic. We have had to think through and debate on the choices and actions we need to consider over the coming months to position us best for success in the medium to long term taking account of the impact on our key stakeholders. The Board has continued to monitor its responsibilities to the Company's different stakeholder groups. Good engagement has been crucial in understanding the views of our stakeholders in order to make informed decisions during this period of crisis. For example, the Company has been seeking regular feedback from employees that has helped to shape its response to the COVID-19 pandemic.

Colleagues

From the outset our focus has been on ensuring we remain in communication with our colleagues and ensure they are kept informed, whether by presentations and question and answer sessions with senior leadership or through other channels, on the actions being taken to keep them safe and to equip them for work as well as to address their wider wellbeing. This is the case whether they are key workers out on site keeping gas and electricity flowing, or colleagues able to work from home.

Communities and governments

Our colleagues have been supporting our communities by volunteering and providing their time and expertise to support charities and the most vulnerable, and we have set up Grid for Good to help play our part in addressing the economic impacts of COVID-19 in the UK and US, including rising youth unemployment. In total National Grid has made donations of around £2.5 million to help those affected by COVID-19, as well as grants and other financial support.

Investors

Having stress-tested the finances of the Company against a number of potential COVID-19 scenarios, the Board recommended a final dividend for 2019/20 and interim dividend for 2020/21 in line with policy. On 2 March, the Company announced its updated policy of growing the dividend per share annually in line with CPIH with effect from financial year 2021/22.

Customers, regulators and suppliers

We suspended our debt collection and customer termination activities across our US jurisdictions resulting in lower customer collections and additional provisioning for bad and doubtful debts. In the UK, we actively supported Ofgem's measures to protect customers by relaxing network charge payment terms for suppliers and shippers facing cash flow challenges as a result of COVID-19.

Our response to the COVID-19 pandemic

April – May – June

- The Board met weekly throughout April to review the COVID-19 situation and to understand the impact on our stakeholders and operations
- Onsite accommodation was set up for control room staff in both the US and UK, with established shift patterns, to protect ongoing operations
- Wellbeing pulse surveys were introduced to get feedback from employees; 70% of our employees responded
- The Company upgraded the provision of gas to a college gym in Long Island to turn it into a 1,000-bed hospital in just 7 days
- The Company was signatory to an open letter from UK business leaders to the government calling for the alignment of economic recovery plans with the country's wider environmental and climate goals
- National Grid Partners (NGP) became an official investor partner in 2020 Clean Fight New York with the aim of supporting energy start-ups with goals of building back better after COVID-19, providing clean energy jobs for the region

July – August – September

- Our upstate New York business submitted a request for new delivery prices beginning in July 2021 with up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers
- The Company demonstrated a strong response, despite the COVID-19 impact, to Tropical Storm Isaias, rapidly restoring power to 95% of 440,000 customers within 55 hours
- We worked to facilitate the safe return to office locations of colleagues across offices, making offices COVID-19 secure and establishing protocols
- The ESO launched 'Dynamic Containment' to facilitate faster acting frequency response in the face of lower inertia and larger, more numerous losses than usual arising from the effects of the pandemic
- Our US business donated $100,000 to Feeding America for its Hunger Action Month, helping tackle food insecurities across Massachusetts, New York and Rhode Island

2020 2021

Delivering safe, reliable networks through the pandemic

Throughout the COVID-19 pandemic the Group has adapted to new ways of working. We have delivered safe, reliable networks, while managing through all the new regulations and restrictions.

UK

The March 2020 lockdown meant that there was a suspension for a few weeks of our capital programmes, but once they resumed, we saw minimal delays. We worked closely with our contractors across all projects to minimise delays associated with COVID-19, including on major projects such as the London Power Tunnels 2 and Hinkley Point projects.

At times, during the summer, electricity demand fell to 20% below expected levels and zero-carbon sources made up their largest ever share of the power mix. For our ESO business, this meant our control room engineers had to take more actions, on more days, increasing and decreasing sources of power to keep the system stable and secure.

Despite the combined challenges of Brexit and COVID-19, NGV successfully implemented alternative trading arrangements to ensure there was no impact to the interconnector portfolio.

US

In the US, our COVID-19 Health and Safety Plan served as a guideline for all employees and contractors throughout the year. We ensured that safety expectations were made clear for new ways of working, including reduced size teams and single occupancy vehicles, allowing us to deliver our critical investment, while limiting the impact of the pandemic on our capital delivery programme.

Allowing for higher storm replacement costs, our electricity business delivered its full capital investment programme for the year. Our gas distribution business was impacted for longer, but recovered in the second half of the year, with expenditure only slightly below plan. Its work included our leak-prone pipe replacement programme, which this year saw a further 350 miles of pipeline replaced, above our target of 300 miles, despite the impact of COVID-19.

We conducted more than 32,000 virtual home energy assessments in New England when in-person home energy assessments were suspended due to COVID-19.

Estimated financial impact

The ongoing financial impact of COVID-19 is largely in line with our expectations, with increased provisions for bad and doubtful debts being incurred.

Group

During the year, the estimated impact of COVID-19 on our operating profit has been £296 million, compared to market guidance of around £400 million. The reduction is largely due to regulatory recovery of some of the US bad debt and the impact of better cost savings than expected. The impact has been more significant in our US businesses than our UK businesses, primarily due to the large US retail customer base. The operating profit impact is driven by the following broad areas:

- the most significant impact on our results is due to approximately £179 million (2020: £117 million) COVID-19-related increase in our provision for bad and doubtful debts, with our total bad debt charges for the period rising from £234 million last year to £326 million this year for the Group as a whole, of which the majority relates to our US business. The additional bad debt charges largely reflect the impacts of moratoria over collection and termination activities that remained in place for residential customers in the US throughout the year;
- our revenues were adversely impacted by approximately £78 million, mainly due to the suspension of late payment fees in the US, lower UK incentives and fewer US customers requesting ‘protected status’ due to the moratoriums on disconnections; partly offset by a recognition of a timing under-recovery in the US relating to allowed revenue of some of the bad debts, through regulatory mechanisms already in place;
- delay in updating rates in our NIMO, KEDNY and KEDLI businesses at the start of COVID-19 of approximately £70 million; and
- estimated incremental costs of £97 million (2019/20: £10 million) incurred related to enabling safe working (PPE, cleaning, sequestering staff, IT for remote access) and costs associated with delays to a number of planned capex works, as a direct consequence of the pandemic. These incremental costs have been partly mitigated by around £69 million of cost savings as a result of customer-facing workplan reductions, the pause in collections activities and lower travel and other costs.

For 2021/22, we expect some continuing impact, driven largely by our US operations where we are expecting further risk of bad debt, although lower than we have experienced in 2020/21 and 2019/20. In the longer term, we expect the impact of COVID-19 on our business to be limited on the basis that the majority of COVID-19-related costs will be recovered through our regulatory mechanisms. However, until the exact mechanism and timing for the regulatory recovery are finalised, we will still experience cash flow impacts from COVID-19 in the shorter term. In the US, we remain confident that we will recover the majority of our COVID-19 related costs relating to bad and doubtful debts through our regulatory mechanisms, either through the usual course of rate filing negotiations such as recovering revenue deferrals, or through separate filings, which we have already commenced in New York, Massachusetts and Rhode Island.

The estimated impact of COVID-19 on our cash flows for the full year is £600–£750 million, lower than our market guidance of up to £1 billion. The incremental cash flow impact beyond the operating profit impact described above results from the weaker demand and lower revenues that we expect to be recovered as usual through regulatory true-ups in later years, lower levels of cash collections from our US customers and revenue deferrals related to Balancing System Use of Charges and other timing differences in the UK that we will recover next year.

October / **November** / **December**

- Notwithstanding Centre for Disease Control (CDC) restrictions, our US business delivered a strong response to the third most impactful storm in the last 15 years, reconnecting, within 72 hours, 95% of 550,000 customers who lost power in New York
- In the final quarter of 2020, a Cogent Valuation report scored National Grid 7.22 out of 10, 5th out of 25 eastern US utilities, for its response to the pandemic
- Putting the spirit of giving into action, our Alliance of Black Professionals (ABP) members volunteered at Soco Restaurant in Brooklyn, New York for their Thanksgiving turkey giveaway event at a time when food insecurity was expected to rise by 38% throughout New York City in 2020, as a result of the pandemic
- In the UK, £83,000 was donated to the Trussell Trust at Christmas, in addition to £18,000 raised from colleagues’ personal contributions

January / **February** / **March**

- Despite the challenges presented by COVID-19, the IFA2 subsea interconnector between the UK and France was launched in January
- In the UK, partnering with Restore Technology and several charities, we continued to provide laptops to schools as the second lockdown forced children to work from home, bringing the total number donated during the pandemic to around 1,400
- The Company has encouraged everyone who is able to have the COVID-19 vaccine to do so as soon as they are eligible, to protect themselves and their family, colleagues and communities, but, in line with industry peers, has not mandated vaccination
- In our US business, the Bill Payment and Customer Assistance Program Management Office continues its targeted customer outreach strategy, focussing on bill payment options, payment assistance programmes, community initiatives, scam awareness and safety protocols with the aim of helping customers maintain their bill health through assistance programmes and energy savings

◆ 2020 ◆ 2021

Chairman's Statement

"Amidst all the change, it's the dedication of our people that has allowed us to navigate challenging times and emerge stronger."

Sir Peter Gershon
Chairman

Over the past year, the COVID-19 pandemic has had a far-reaching and deep impact across the whole world. But through it all, we have delivered good operational performance and have begun a major strategic pivot for the Group.

So, I want to begin by thanking those who have worked tirelessly across our business, as they played their part in keeping our networks running and the energy flowing to hospitals, care homes, businesses and homes. Amidst all the change, it's the dedication of our people that has allowed us to navigate challenging times and emerge stronger.

I am also pleased that we are able to use our extensive resources to help support the communities we serve to get through and recover from the pandemic. Although the Company has implemented a number of measures to limit discretionary external spending, it has not relied on government support.

Strategy

As the Board has said on many occasions, our vision at National Grid is to be at the heart of a clean, fair and affordable energy future.

We'll do this through the execution of our strategic priorities, which are to deliver for our customers efficiently, to grow our organisational capabilities, to empower colleagues for great performance and to enable the energy transition for all.

It's with this vision in mind that we announced three significant and connected transactions:

- the proposed acquisition of WPD in the UK from PPL Corporation;
- the sale of our Rhode Island business in the US to PPL Corporation; and
- the commencement of a process later this year for the sale of a majority stake in our UK GT and metering businesses.

These transactions will significantly improve National Grid's strategic positioning while enhancing our long-term growth prospects, put National Grid at the heart of delivering net zero across the UK electricity sector, and deliver attractive financial returns for our shareholders.

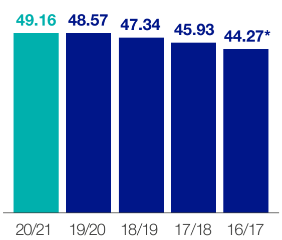
Following the vote at a General Meeting in April, I'm delighted that our shareholders strongly supported the proposed acquisition of WPD.

Final dividend of

32.16p

per share proposed to be paid on 18 August 2021

Full year dividend (pence per share)



*excludes a special dividend of 84.375p.

The 2021 Annual General Meeting (AGM) of National Grid plc will be held at 11.30am on Monday 26 July 2021. More details on the arrangements of this year's AGM and how to view the live webcast of the AGM can be found on our website in the Investor section at: nationalgrid.com/investors.

Safety
Safety is incredibly important to us and we're pleased we maintained a world class benchmark performance with an injury frequency rate of 0.10 during the year. Despite the strong performance, in November 2020, a contractor in New York suffered a fatal injury. An investigation was launched, resulting in further assurance checks being developed. It's absolutely imperative that we continue to focus on encouraging good safety behaviours across the entire workforce.

Dividend
The Board has recommended an increase in the final dividend to 32.16 pence per ordinary share ($2.2812 per American Depository Share) which will be paid on 18 August 2021 to shareholders on the register of members as at 4 June 2021. If approved, this will bring the full year dividend to 49.16 pence per ordinary share, an increase of 1.21% over the 48.57 pence per ordinary share in respect of the financial year ended 31 March 2020. This is in line with the increase in average UK RPI inflation for the year ended 31 March 2021 as set out in our previous dividend policy. In March 2021, we announced that from 2021/22, the dividend policy will aim to deliver annual dividend per share growth in line with the rate of CPIH inflation.

Regulatory issues
We continue an open dialogue with our regulators. In the UK, following a detailed analysis of Ofgem's RIIO-2 Final Determination, we submitted a technical appeal to the Competition and Markets Authority (CMA) on two points.

We welcomed the government's consultation into energy system operation, and we have been working closely with the government, regulator and industry to explore what changes will be needed to achieve net zero.

We also welcome the Prime Minister's 10 Point Plan and the government's very recent announcement to set a new target of 78% reduction in greenhouse gas (GHG) emissions by 2035, compared with 1990 levels.

Similarly, the US pledged to cut carbon emissions by 50–52% below 2005 levels by 2030. This new target almost doubles their previous promise and is a welcome step forward.

In the US, we filed a proposal for review with the Massachusetts Department of Public Utilities to increase gas distribution rates for our Massachusetts gas customers. The total impact of $139 million would be spread across our customer base. This rate case is still underway and if approved, these new rates would come into effect in November 2021.

Our upstate New York three-year rate agreement expired in April 2021, and in July we submitted a request for new delivery prices beginning in July 2021.

Performance
The International Financial Reporting Standard (IFRS) technical requirements make reporting some of the performance measures that we use as a regulated business challenging. We provide additional information, on page 34, about both our significant assets and liabilities that do not form part of our audited accounts, to help our investors gain a fair, balanced and understandable view of our business. Where practicable, we reconcile these with our statutory measures in 'Other unaudited financial information' on pages 250 – 259.

How we generate and preserve value
During the year, we published our Responsible Business Charter (RBC), setting out what our responsibility means for us and commitments and ambitions over the coming years. It's important that we are open and transparent for all our stakeholders, and that's why we are reporting on our progress in our new annual Responsible Business Report (RBR).

It's also why this year we want shareholders to have their say on how the Company is tackling net zero. As a result, we are making a commitment at this year's AGM to bring our climate transition plan to be voted on by our shareholders at our AGM in July 2022. Engagement with our key stakeholders has been a crucial part of defining our net zero commitments and ambition. It has helped us better understand their expectations to develop a path we believe is consistent with the Paris Agreement and consistent with the Task Force on Climate-related Financial Disclosures (TCFD).

Culture, Inclusion & Diversity
In 2020, the Board agreed a new approach to the way it monitors culture, inclusion and diversity to enable it to assess progress. We have made progress in a number of areas, pointing towards real change. In particular, our business leaders have demonstrated the ability to change behaviours and ways of working in the face of the pandemic and insight gleaned from our internal communication and engagement channels shows our colleagues have responded positively to the human and authentic way we have led over the last 12 months.

I am pleased that our commitments have been recognised with a number of external awards including the FT's Diversity Leaders List. As a result of our continued dedication and focus on inclusion and diversity, our ONE employee resource group was awarded the title of Top Network Group at the 2020 Ethnicity Awards, and we were placed in the top 10 in the Outstanding Employer category. This is in addition to the numerous individual awards across the business.

We are making progress, but the Board recognises that we have more work to do. This is important now, more than ever.

Appointments and Board changes
You can read more details of all our Board members' experience and the Committees they support in the Corporate Governance review on pages 72 – 73.

This has been my last year as Chairman as I stepped down on 31 May after over nine years in the role, and I am delighted to be handing over to Paula Rosput Reynolds as the new Chair.

During my time as Chairman, there has been significant transformation in the energy sector, and I am optimistic about the direction of travel. I believe innovative and transformational engineering will continue to be critical to tackling climate change. I am also pleased that over this period, our Total Shareholder Return has averaged just over 9% compared with the FTSE 100 average of just over 6%.

I have great confidence that, as Paula takes up her role, National Grid will continue to lead the way to a clean, fair and affordable energy future.

Finally, it is with great pride that I would like to take this opportunity to express my thanks to colleagues across our business who are tackling the impacts of climate change with huge professionalism and commitment and finding innovative engineering solutions in the pursuit of net zero goals.

Sir Peter Gershon
Chairman

Chief Executive's review

"We will enhance our role in the energy transition and drive long-term shareholder value."

John Pettigrew
Chief Executive

Key highlights in 2020/21

10.6%
RoE

£5bn
investment in critical infrastructure

1,000
economically disadvantaged young people helped through Grid for Good programme

Our vision is for National Grid to be at the heart of a clean, fair and affordable energy future. It's with this vision in mind that in March, we announced three transformational deals that will significantly change National Grid's positioning and give us an even greater role to play on the journey to net zero.

Our acquisition of WPD, the UK's largest electricity distribution network operator, for an equity value of £7.8 billion, selling our Rhode Island gas and electricity business for an equity value of $3.8 billion (£2.7 billion) and initiating a sale process for a majority stake in our UK GT and metering business, will enhance our role in the energy transition and drive long-term shareholder value.

With increased exposure to the UK's electricity sector, we will be able to take a more holistic approach, helping the UK's wider net zero ambitions.

For example, with renewable generation, our high- and low-voltage engineers will be able to share their knowledge and experience, to efficiently deliver increasing levels of renewables connections, both large and small.

We will also be able to share best practice across engineering and customer solutions, to help drive a more effective roll-out of the infrastructure needed for electric vehicles. While we are working to deliver ultra-fast charging infrastructure at a national level, WPD is looking to deliver over 200,000 charging points across its territory by 2023.

When all three transactions are completed, nearly 70% of group assets will be focused on electricity, up from around 60% today. That's very significant at a time when electricity demand is expected to rise substantially in the years ahead. The UK Committee on Climate Change expects a 70% increase in UK electricity demand by 2050. As the largest electricity transmission and distribution owner and operator in the UK, we will play a pivotal role in enabling growing levels of electrification.

These transactions will transform National Grid's positioning and strengthen our core ambition to be at the heart of a clean, fair and affordable energy future.

Increasing political will

It has been a significant year with climate change continuing to rise up the agenda, despite the challenges posed by the COVID-19 pandemic. We have seen businesses, governments, regulators and stakeholders come together with the shared ambition of reaching net zero by 2050. We welcome the important progress that has been made across all our jurisdictions.

National Grid applauded the new US administration's decision to rejoin the Paris Agreement on President Biden's first day in office and the package of executive orders signed, which aim to put the US on the path to reducing its share of emissions. The Energy Act of 2020 was passed by US Congress in December 2020, extending financial support to key decarbonisation technologies and infrastructure through tax credits, research and development funding, and loan guarantees.

Both Massachusetts and Rhode Island launched the Transportation & Climate Initiative, which commits to cutting GHG emissions from motor vehicles by 26% between 2022 and 2032 and investing $300 million per year in equitable low-carbon transport. In July 2020, New York issued an EV 'Make Ready' Order, authorising public utilities to invest $700 million by 2025 to build out beneficial EV charging infrastructure.

In the UK, we welcomed the Energy White Paper, setting out the steps the government will take over the next 10 years to cut emissions from industry, transport and buildings, while creating new jobs. We were also pleased that the UK government confirmed funding for the ultra-fast charging network needed to enable the large-scale take-up of electric vehicles.

Alongside this, I'm pleased that 2020 was the greenest year on record for Britain's electricity system including almost 68 days with coal-free generation. Record-breaking levels of power from zero carbon sources were key factors in reducing 2020's carbon intensity – while record low electricity demand during the nation's lockdown also contributed. In the US, our energy efficiency programmes, the largest in the country, have saved more than 4.2 tonnes of carbon since 2015.

2021 will be a crucial year as the UK prepares to host COP26, where we are a principal partner. It is a unique opportunity to drive more ambitious change and show that with the right policy and regulatory frameworks in place, we can take huge strides forward to reach net zero.

Investing in our infrastructure

During the year, investment in critical infrastructure remained strong, with capital expenditure at £5 billion. This was driven predominantly by continued investment in large capital programmes in our UK Electricity Transmission business, continued high levels of US capital expenditure, much of it mandated on safety spend, and investment in National Grid Ventures as we progress our interconnector projects. This has driven asset growth of 5.6%.

Across our US gas businesses, we invested $1.77 billion, including the replacement of more than 350 miles (563 kilometres) of leak-prone pipe. And in our electricity business, in New York, we energised two new substations to deliver continued safe, reliable electricity to customers. National Grid's three newest substations in the region represent a total investment of $42.5 million.

Looking forward, National Grid will continue to work with stakeholders to develop infrastructure projects. For example, National Grid is a co-participant to build the Northern New York Priority Transmission Project (NNYPTP), a major transmission line rebuild project that will help unlock existing renewable energy resources such as wind and hydro power in the region, and will also lead to emissions reductions of 1.2 million tonnes of CO_2 and save $447 million in transmission congestion costs. The project is expected to begin construction next year and be completed by the end of 2025.

In the UK, we invested just over £1.2 billion across Electricity and Gas Transmission. Major electricity projects included the 21-mile (34-kilometre) London Power Tunnels 2 project and the 29-mile (47-kilometre) Hinkley Point connection. In our gas business, we've completed the tunnelling of the Feeder 9 pipeline and secured our place in the Guinness World Records for the world's longest hydraulically inserted pipeline at 3 miles (5 kilometres).

NGV's capital investment decreased, principally due to a net decrease in interconnectors under construction and lower investment on IFA2, the interconnector between the UK and France, which successfully went into operation in January. With a capacity of 1,000 MW, the 149-mile (240-kilometre) subsea power cable can provide enough energy to power 1 million British homes. Since construction began in 2018, IFA2 has seen more than 1,000 engineers and specialists work a total of more than 3 million hours.

Within National Grid Renewables in the US, we signed a power purchase agreement with Basin Electric Power Cooperative for a large solar project in South Dakota, which is expected to generate 128 MW of clean power from 2022. We also signed power purchase agreements with Big Rivers Electric Corporation for the 160 MW Unbridled Solar Project in Kentucky and started construction for the 40 MW MiSolar Portfolio in Michigan which, when completed later this year, will power around 8,000 homes. We have also started construction on the 200 MW Prairie Wolf Solar Project in Illinois. The project will remove 285,000 metric tonnes of CO_2 from entering the atmosphere annually, which is the equivalent of fuelling 34,321 homes' energy use for one year.

Innovations and new technology

Our commitment to net zero continues to shape our innovation strategy. And I'm very proud of the innovative solutions that our teams are working on, which are focused on the advancement of products, systems and work methods that prepare the way for more efficient and safer networks that further facilitate the integration of renewables.

Towards the end of this year, we will open the Deeside Centre for Innovation. We hope it will become a globally recognised centre for innovations and collaborations in all green technologies. It will be the first test centre in Europe where testing can be carried out at voltages of up to 600 kV at an off-grid substation, bridging the gap between laboratory testing and installation in a connected and operational substation.

We've continued to advance efforts to decarbonise our gas network for a clean energy future. In the UK, Ofgem's Network Innovation Competition approved a first-of-its-kind offline hydrogen research facility to understand how transmission assets could be used to transport hydrogen in the future to heat homes and deliver green energy to industry. Similarly, the US Department of Energy awarded $12.4 million to facilitate research and development in accelerating hydrogen blending into the transmission infrastructure. Separately, we've partnered with Standard Hydrogen Corporation to demonstrate the US's first multi-use, renewable hydrogen-based energy storage/delivery system in New York's Capital Region, with completion expected by late 2022.

Scan here to view our story

Green collar jobs: Julia Gold – growing up green

I'm Principal Strategy and Policy Analyst – Clean Transportation, covering Massachusetts, New York and Rhode Island.

I help to accelerate the adoption of electric vehicles and prepare the grid for our evolving transportation system. This includes designing programmes for our customers, collaborating with stakeholders, developing public policy priorities and coordinating with state regulators.

The transportation sector, which is responsible for almost 40% of the greenhouse gas emissions in the Northeast, is an essential part of shaping our path forward. My role is to help accelerate this transition.

I grew up in a family of environmental activists – sustainability has always been a big part of my life.

Chief Executive's review
continued

On asset health innovation, we are developing valve clean-up techniques and looking at drone technology for inspection, flying drones beyond visual line of sight to inspect large areas of our network and assets.

And in the US, National Grid Partners has a growing portfolio of 23 companies and four fund investments at a fair value of £178 million. It is investing in a smarter energy future, with artificial intelligence (AI) playing a central role. For example, this year, we invested in Silicon Valley-based AiDash, which uses satellite imaging and AI to protect transmission and distribution grids from overgrown vegetation.

Delivering for our customers efficiently

We continue an open dialogue with our regulators. In the UK, following a detailed analysis of Ofgem's RIIO-2 Final Determinations, we accepted the overall package for the ESO, and broadly accepted the majority of the package for the ET and GT businesses. Whilst we welcome the significant movement from Ofgem's Draft Determinations in total expenditure allowances and greater flexibility around future net zero investment for ET and GT, we have submitted a technical appeal to the Competition and Markets Authority (CMA) regarding Ofgem's proposed cost of equity and outperformance wedge. The CMA has accepted our appeal on both points and expects to reach a decision in the autumn.

In the US, we filed a proposal to increase gas distribution rates for our Massachusetts gas customers. This rate case is still underway and if approved, these new rates would come into effect in November 2021. Separately, our upstate New York three-year rate agreement expired in April 2021, and in July we submitted a request for new delivery prices beginning in July 2021. And in May, we reached an agreement on a joint proposal with New York PSC Staff for new rates in KEDNY and KEDLI, our downstate New York gas businesses, which provides funding for research into hydrogen blending, and geothermal and natural gas projects. The NYPSC's final decision is expected later this summer.

As we invest to decarbonise the energy system, driving operational excellence and financial discipline to keep bills affordable for customers is more important than ever.

That's why, in the UK, we launched ConnectNow, a one-stop portal for electricity connection customers, which received high direct customer satisfaction feedback.

Customer performance remains a key metric for National Grid, and so I'm pleased we've seen a steady increase in our customer satisfaction scores for ET and GT. In the US, customer sentiment has improved over the past year and we have appointed a Chief Customer Officer. I am confident that they will help to further improve customer satisfaction and make it easier for our customers to engage with us.

In both the UK and US, we continued to maintain high levels of reliability on all our networks. We successfully managed low levels of demand, particularly in the UK, with the ESO developing new flexibility tools to maintain security of supply. And in the US we've responded to some of the most impactful storms we've seen in almost 20 years. Hurricane Isaias was one of the most severe weather events to affect our customers. Despite COVID-19 adjustments made early on to accommodate Center for Disease Control (CDC) and other restrictions, our storm response performance has remained focused and steady. Our efforts around recovery and response continue to be recognised across the industry, receiving multiple awards in 2020, including from the Edison Electric Institute and the North Atlantic Mutual Assistance Group.

Optimising performance

The UK regulated businesses delivered a weighted average RoE of 12.6%, consistent with the return achieved in the prior year. US RoE decreased to 7.2%.

Enabling the energy transition for all

In October, we published our Responsible Business Charter (RBC), which set out ambitious future priorities for the business.

We are publishing for the first time a separate Responsible Business Report alongside the Annual Report to report annually against the commitments set out in our Charter.

Our carbon emission reduction targets are aligned to a well below 2°C pathway and have been officially verified by the Science Based Targets initiative (SBTi).

Empowering colleagues for great performance

As we look ahead at the significant changes needed across our industry, the politics and regulations to enable the decarbonisation of the economies in which we operate, it is important that we are set up in the best possible way to deliver against the challenges of a clean energy future.

That's why we are evolving our operating model in both the US and the UK. We need to continue to drive efficiency through innovation to meet the changing needs of our customers and will do so through a programme of changes over the next 18–24 months.

In our RBC, we set specific and sustainable targets for diversity across the organisation for the next 5–10 years in order to achieve the inclusive culture and diversity we seek. We want our workforce to reflect the diversity of the communities we serve and are committed to providing an inclusive, equal and fair working environment. I am delighted that we have appointed a Chief Diversity Officer for the first time, this year. This will help us achieve our ambitions.

Against the backdrop of the COVID-19 pandemic, when young people are facing one of the toughest job markets for generations, there is a huge opportunity to support and leverage motivated young minds through apprenticeship programmes.

Unemployment and social exclusion amongst young people existed before the COVID-19 pandemic, but the economic downturn in the UK and US has seen youth unemployment double, pushing young people even further away from the job market. That's why we set up Grid for Good, a flagship energy industry programme to deliver a positive impact to socio-economically disadvantaged young people. The scheme sees us working with our supply chain partners and charities to provide training and employment opportunities for 16–24 year olds, who come from disadvantaged backgrounds. We've already helped 1,000 young people through our pilots and trials, and in our first year, this will encompass 12,000 volunteering hours from our colleagues.

Looking ahead

I would like to welcome Paula Rosput Reynolds as our new Chair. Paula joins us as the first female Chair at National Grid. She brings a wealth of board-level experience leading global companies in the energy and financial sectors. Her experience within international and US companies and insight into strategic and regulatory issues will be an asset to the Board, and I look forward to working alongside her.

Our outgoing Chair, Sir Peter Gershon, has made an exceptional contribution to the business and I would like to thank him on behalf of the Board for his wise counsel and strategic direction.

Finally, I would like to extend my personal thanks to all my colleagues who have shown such dedication and commitment to delivery and ensuring the networks keep running as efficiently and safely as ever through a uniquely challenging time.

J. Pettigrew

John Pettigrew
Chief Executive

Scan here to view our video

Or visit:
nationalgrid.com/about-us/annual-report-and-accounts

Our business environment

As well as managing through the COVID-19 pandemic, our societal ambition remains to achieve net zero. We are committed to working with governments and regulators in the UK and US to help them meet their own carbon reduction targets in a fair and affordable way.

Net zero

The COVID-19 pandemic has contributed to an increase in climate action by many stakeholders this year, including: investors, companies and governments. This global focus on the 'critical decade' (2020-2030) has created a drive for action which has been supported by UK and US governments.

68%

National Grid's reduction in Scope 1 & 2 carbon emissions since 1990.

Net zero

by 2050

We are continuing to progress towards our own net zero commitment to reduce our greenhouse gas (GHG) emissions to net zero by 2050. As well as our own direct emissions, we are also committed to working with governments and regulators in the UK and US to help them meet their own carbon reduction targets. As a principal partner for COP26, we will be playing our part to show how we can achieve net zero, utilising the technologies we have today and developing opportunities for the future.

Stimulating a 'green economic recovery', with an emphasis on jobs and skills for the future, will be key as economies are rebuilt in the wake of COVID-19. At National Grid, we are focused on how to manage the energy transition whilst balancing key societal issues for the regions in which we operate.

2020/21 developments

UK

Following the UK's binding commitment to net zero emissions by 2050, further developments towards decarbonising the economy have been seen throughout 2020.

2020 was the greenest year on record for Great Britain's electricity system, with record-breaking levels of power from zero-carbon sources aided by low electricity demand during the nation's lockdown.

The publication of the Prime Minister's Ten Point Plan and the Energy White Paper in late 2020 has committed the UK to delivering clean energy and transport with support for: increased offshore wind capacity, hydrogen trials, nuclear and CCUS investment, roll-out of electric vehicles and charging infrastructure, greener maritime trials, and targets to decarbonise our homes.

US

Early actions by the Biden Administration signal climate change as a top priority for the federal government over the next four years. Executive Orders were issued re-joining the Paris Climate Agreement and directing all federal agencies to review, revise and add policies to mitigate climate change and bolster environmental justice.

The Energy Act of 2020 was passed by US Congress in December 2020, extending financial support to key decarbonisation technologies and infrastructure through tax credits, research and development funding and loan guarantees.

The Accelerated Renewable Energy Growth and Community Benefit Act was passed in April 2020, which granted the New York Power Authority (NYPA) the authority to designate priority transmission projects (PTPs) in order to expedite New York State's green energy policy objectives pursuant to the Climate Leadership and Communities Protection Act.

Massachusetts proposed its Clean Energy and Climate Plan to 2030, which provides details on the actions the state will undertake through the next decade to ensure the 2030 emissions limit is met. Both Massachusetts and Rhode Island launched the Transportation & Climate Initiative, which commits to cutting GHG emissions from motor vehicles by 26% between 2022 and 2032 and investing $300 million per year in low-carbon transport. In July 2020, New York issued an EV 'Make Ready' Order, authorising public utilities to invest $700 million through to 2025 to build out EV charging infrastructure.

Our response

- We have been announced as a COP26 principal partner and are working closely with the UK government and other sponsors to create a successful and ambitious climate change conference in November 2021.
- In April 2021, National Grid joined the SBTi, with our commitments to reduce our emissions in line with climate science approved by SBTi. The targets we have set are consistent with the reductions required to keep warming to well below 2°C.
- For the fifth consecutive year we received the prestigious climate change 'A' score from CDP Climate Change for our actions in corporate sustainability for cutting emissions and moving towards a low-carbon economy.
- This year, we are presenting our shareholders with our intention to share our climate transition action plan ahead of the Company's 2022 AGM and for an annual vote on our climate change-related net zero commitment and associated targets such as our 2030 net zero target.
- We are strategically pivoting our UK portfolio towards electricity, to be at the heart of the energy transition. On 18 March 2021 National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals. The proportion of the Group's assets in electricity will increase from around 60% to around 70% subject to completion of the WPD Acquisition, the NECO Sale and the proposed sale of a majority stake in our UK GT business.
- Our UK GT business got approval for £9 million of funding via the Network Innovation Competition (NIC) for FutureGrid, a project to test the possibilities of using hydrogen on the National Transmission System (NTS).
- We joined 11 leading organisations in the £75 million bid to create the world's first net zero industrial cluster in the Humber region in the UK.
- We helped secure $12 million funding from the US Department of Energy to facilitate research and development in accelerating hydrogen blending into the transmission infrastructure, working with six national laboratories, 20 industry leaders and leading academic institutions.
- The innovative 'Home Energy Savings Program' has been launched in Central New York in cooperation between the New York State Energy and Research Development Authority (NYSERDA) and National Grid. The programme supports clean energy jobs and offers energy bill savings. This also supports Governor Cuomo's nation-leading goals of an 85% reduction in greenhouse gases by 2050.
- NYPA announced National Grid as its selected co-participant to move forward with the Northern New York PTP, a major transmission line rebuild that will harden the resilience of New York's power grid. The project includes rebuilding transmission lines and rebuilding and expanding several substations along the impacted transmission corridor, and will help unlock existing renewable energy sources in the region and is expected to bring hundreds of clean energy construction jobs.
- A power purchase agreement with Basin Electric Power Cooperative has been published for a large solar energy project in South Dakota. It is expected to generate 128 MW of clean power from 2022, provide support for the local community, and offer around $500,000 of charitable funds to The Wild Springs Education Fund.
- The 40 MW Michigan Solar Portfolio has started construction to power around 8,000 homes.
- The New York Energy Solution, being developed by New York Transco and our NGV business joint venture, continued to progress through New York State's Article VII permit application process to modernise the electricity grid. The project is expected to start construction in 2022.
- National Grid Partners became an official investor partner of 2020 The Clean Fight New York with the aim of supporting clean energy startups with goals of building back better after COVID-19 and providing clean energy jobs for the region.

The future of heat:

The UK Climate Change Committee's (CCC) 6th Carbon Budget report in 2020 highlights there will be a combination of solutions required to decarbonise heat. These solutions will include both mature and nascent technologies of electrification, hydrogen, biofuels and carbon capture utilisation and storage. As a result, we currently continue to believe that our gas assets will have useful purpose in supporting the transition to clean gases. However, the scale of the networks will be dependent on technological developments and policy choices of governments and regulators.

The future of power:

The UK CCC's 6th Carbon Budget report in 2020 highlights the importance of electrification across power, heat, and transport, for meeting net zero. As large-scale renewable resources play an essential role in the low-carbon future, we are excited to help connect these clean resources to our communities. We recognise the need for continued investment in our transmission and distribution assets to make this a reality.

The future of transport:

We will continue to promote both EV adoption and charging infrastructure, preparing for 'make ready' investments to reinforce our infrastructure across the UK and US.

Our business environment
continued

	2020/21 developments	Our response

Fairness and Affordability

National Grid delivers energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring that no one is left behind in the short term during the COVID-19 crisis, or in the longer-term transition to clean energy.

#1

#1 Ranked US electric utility for energy efficiency by American Council for an Energy-Efficient Economy.

3%

UK electricity transmission network costs per average household dual fuel bill.

2020/21 developments

UK

Cost of energy and the lowest cost transition to net zero continues to be a key priority, evidenced by Ofgem's RIIO-2 Final Determinations to reduce network costs in energy bills and the plans set out by BEIS in the Energy White Paper to keep energy bills out to 2030 in line with 2019.

Advisors such as the Climate Change Committee continue to stress the importance that net zero is delivered in a fair way as a 'just transition' across society, with vulnerable consumers protected, and have provided analysis on how both net zero and affordable energy bills can be achieved.

US

COVID-19 has brought serious economic hardship to many of our customers, elevating affordability concerns even further. Each of our US jurisdictions last year ordered extended moratoria on disconnection for non-payment. The crisis also saw increased prioritisation and deferral of utility spend to alleviate economic distress during the pandemic.

Our response

- In October, across our UK and US businesses, we launched our Responsible Business Charter, committing to have a real impact across five key areas: the environment, our communities, our people, the economy, and our governance.
- We have set up Grid for Good to help play our part in addressing the effects of the economic downturn in the UK and US which has seen youth unemployment double in the wake of the pandemic.
- National Grid was one of 200 signatories to an open letter from UK business leaders to government calling for the alignment of economic recovery plans with the UK's wider environmental and climate goals, including a quote from John Pettigrew calling for 100,000 jobs to be created in the energy sector as we work towards net zero.
- In the UK, we donated £83,000 to the Trussell Trust, following a £100,000 donation to the Trust previously to support its network of 1,200 food bank centres providing emergency food and compassionate, practical support to people in crisis.
- In the US, we deferred our New York rate increases and established special COVID-19 payment plans to relieve pressure on customers during the challenging COVID-19 period.
- In our US business, we partnered with Feeding America for Hunger Action Month in September to donate $100,000 for helping tackle food insecurities across Massachusetts, New York, and Rhode Island.
- In the US, we filed a customer assistance proposal for NIMO with our New York regulator that would provide up to $50 million in financial assistance to support economically vulnerable residential customers as well as businesses that are struggling because of the pandemic's financial impact.
- More than $760,000 funding has been given in economic development grants for seven Western New York initiatives to grow the regional economy.
- $500,000 support funding was provided to customers with health impacts, financial hardships and disruption caused by COVID-19, helping communities across Massachusetts, New York and Rhode Island.
- Via National Grid Renewables we established a Community Fund for its 200 MW Crocker Wind Farm in South Dakota. The Community Fund will provide an estimated $800,000 in charitable funding to benefit surrounding communities over the first 20 years of the project's operation.

Decentralisation

The energy system continues its transition from high to low carbon. This change coincides with a shift to more decentralised generation, including renewables and battery storage. As the volume of this intermittent and distributed generation increases, a more resilient and flexible system will be required; one that makes best use of available energy resources to meet consumers' needs in a balanced, efficient and economical way.

28%

of generation in the UK is now connected at the distribution level or behind the meter.

2020/21 developments

UK

There is continued support for developing decentralised electricity systems, supported by developments in smart systems and flexibility solutions, and local initiatives to develop decarbonisation pathways.

The BEIS Energy White Paper shines a light on the growing importance of a smarter, more flexible system, which has the potential to unlock savings of up to £12 billion per year by 2050 compared to a system with low levels of flexibility. This in turn will lower costs for customers of the future as it means less generation and network need to be built.

US

The state of Massachusetts expanded its incentive programme ('SMART') in April 2020 to support the development of solar energy, doubling capacity eligible for incentives to 3,200 MW and including adders for paired storage.

New York State regulators approved plans to install advanced metering infrastructure which will allow future customer-centric solutions and services.

Our response

- The WPD Acquisition will further enable us to be at the heart of the energy transition and further support the development of decentralised electricity systems in the UK.
- In the UK, the first small-scale generator was connected to our Nursling substation via the tertiary winding on our super grid transformers.
- National Grid announced the transition to a new operating model effective from April 2021. As a result, US business operations will be aligned to New York and New England to be more customer focused.
- Following acquisition of Geronimo Energy, a leading wind and solar developer in North America, last year, we expanded our onshore portfolio and launched National Grid Renewables.
- Our partner Sunrun, the leading home solar, battery storage and energy services company in the US, recently announced the launch of two pilot programmes to aggregate home batteries to act as virtual power plants in Southern California and New York. The programmes will enable approximately 300 customers in each state to create distributed solar-plus-storage networks through Sunrun's Brightbox home energy systems that local utilities can then call on to provide peaking capacity.

Digitalisation

As the COVID-19 pandemic accelerated the migration to digital, utilities continued to advance their digital capabilities. Customers are benefiting from more access to digital information to support their decision making and more digital ways of engaging. Through the power of sensor data, advanced analytics and Artificial Intelligence (AI) we are improving the way we manage our assets and by providing omni-channel digital tools we are able to enhance the productivity and engagement of our employees.

150

New digital substations to be built in the next 10 years by National Grid on its electricity networks. A digital substation leverages the latest technology to enable better control of the electrical system, providing more real-time data for predictive maintenance, enhanced network reliability and savings for customers.

2020/21 developments

Even before COVID-19, an energy consultancy, DNV, had found that 40% of the 1,919 energy professionals they surveyed considered digitalisation to be at the core of their corporate strategies. The impetus to accelerate digital transformation has only grown since then, with the research group International Data Corporation, expecting a 27% increase in comprehensive digital roadmap strategies to 75% of all organisations by 2023 in their most recent forward-looking predictions.

Utilities across the globe are facing greater pressure than ever to decarbonise and democratise our energy resources. That will only be possible through effective digital transformations that put forward our best digital innovations and drive widespread cultural change across the organisation. Advancements in AI, machine learning, the internet of things, cloud computing, and digital workflow automation will drive greater efficiencies and better decision-making for all energy stakeholders while we push for a cleaner and fairer future.

Our response

- In the UK, we introduced a brand-new Interconnector Monitoring and Response Centre (IMRC) across our North Sea Link and Viking Link interconnectors, currently under construction. The IMRC will deliver numerous benefits such as increased resilience, a closer relationship between the operators and the commercial teams as well as increased efficiency. It will also provide unique opportunities for our IMRC operators to develop as they work across both NSL and Viking Link.
- In the US, we have invested in a data-driven work plan optimisation product that will deliver eight-figure capital and operational expenditure savings within four years. This product delivers an optimised work, budget and resource plan.
- Re-imagined and launched a new billing experience for our large commercial and industrial customers that manage several hundred bills monthly for large mutli-building and multi-facility organisations. This intuitive and easy to use interface has improved customer satisfaction by 63% for this segment as well as increased e-bill and e-pay enrolment by 50% which helps save on paper and mailing costs.
- Leveraging satellite imagery along with computer vision AI, we are directing our vegetation management teams to focus on areas of the network that carry the greatest risk of vegetation-driven outages. This replaces traditional time-based vegetation management with real-time, AI-driven, optimised decision-making, reducing operational costs, and improving the reliability of the electricity network.
- Our Digital Acceleration Team has been working with our UK ET business to implement two innovative digital products – ConnectNow, which lets new customers research, apply for and track connection applications online, and Connect3D, which will digitise our connections design process, reducing lead times and enabling cost savings through standardisation across customer and asset replacement projects.
- National Grid Partners has invested $6 million in two artificial intelligence startups (Aperio Systems and AiDash) to secure critical network infrastructure and reduce costs for customers.

Case study – Gas

The future of clean gas across the UK and US

UK – Landmark study reviews current technology that could help roll out hydrogen across the UK gas network

National Grid, in collaboration with Cadent, Northern Gas Networks, SGN and Wales & West Utilities, has completed a feasibility study that could promote an earlier and more flexible conversion to hydrogen for certain areas of the UK gas network. The first-of-its-kind project examined the application of hydrogen deblending technologies within a network to control the gas blend that a customer might receive. Hydrogen deblending would allow for a varying mix of hydrogen and natural gas to flow through the network, and then separating the two gases so a controlled blend can be supplied to the customer. The deblending feasibility study has shown that the UK gas networks could use the concept of deblending as a tool to aid the transition to a green gas network which could help facilitate the decarbonisation of industry, heating, transport and green power generation.

US – Accelerating hydrogen blending to decarbonise heat

National Grid helped secure $12.45 million in funding from the US Department of Energy to facilitate research and accelerate the potential of hydrogen blending, working with six national laboratories, 20 industry leaders and leading academic institutions to support the research on blending hydrogen into natural gas distribution systems. This work will directly support National Grid's pathway to net zero, including unlocking the true potential for hydrogen as a renewable source of energy that can serve multiple sectors of the economy, including heat.

Case study – Electricity

The future of electric transport across the UK and US

UK – Supporting the roll-out of high-power electric vehicle (EV) chargers across the motorway network

National Grid is actively engaging with the wider transport industry to support transport decarbonisation, from heavy goods vehicles (HGV) and rail, through to the maritime and aviation sectors. With a focus on passenger transport, National Grid has been working alongside the UK distribution companies to support the roll-out of high-power chargers (>150kW) across the motorway network, called the Rapid Charging Fund. Recently, the Rapid Charging Fund received £950 million of government funding, to support the necessary connection infrastructure to facilitate this roll-out. This covers transmission and distribution connections across the UK, targeting at least six high-power chargers by 2023, aiming for 6,000 by 2035. This will enable drivers to be within 30 miles of a high-power charger across the motorway network, thus reducing range anxiety, supporting the wider uptake and deployment of passenger EVs and improving air quality.

US – Launching scalable vehicle-to-grid (V2G) electric school buses

Over the last year, National Grid partnered with Highland Electric Transportation and the City of Beverly in Massachusetts to deliver a V2G electric school bus and accompanying charging infrastructure to Beverly Middle School. The project is the first-of-its-kind to lease the electric bus to a school at the cost of a standard diesel bus. Highland was able to achieve this through grants and by participating in National Grid's and ISO-New England's demand response programmes such as V2G energy storage, which will begin this summer. The project has generated a great deal of interest in electric school buses throughout the rest of National Grid's territory and has been critical in enabling Highland to secure a $253 million venture capital investment and a contract with Montgomery County Schools in Maryland for 326 electric school buses. This innovative business model demonstrates the opportunity for V2G to improve electric bus project economics, accelerating the uptake of electric transport.

Delivering against our strategy

To own and operate large, long-life energy assets in networks and renewables that deliver fair returns and high societal value. Our portfolio of mainly regulated assets in stable geographies will be underpinned by a strong and efficient balance sheet.

Our purpose

To Bring Energy to Life.

Our vision

To be at the heart of a clean, fair and affordable energy future.

Our values

Every day we … do the right thing, find a better way, and make it happen.

Taken together, these values guide our actions and behaviours as a responsible business and help us create a culture where colleagues become less cautious and take greater ownership. At National Grid, we expect our leaders to be role models and engage all colleagues to demonstrate our values:

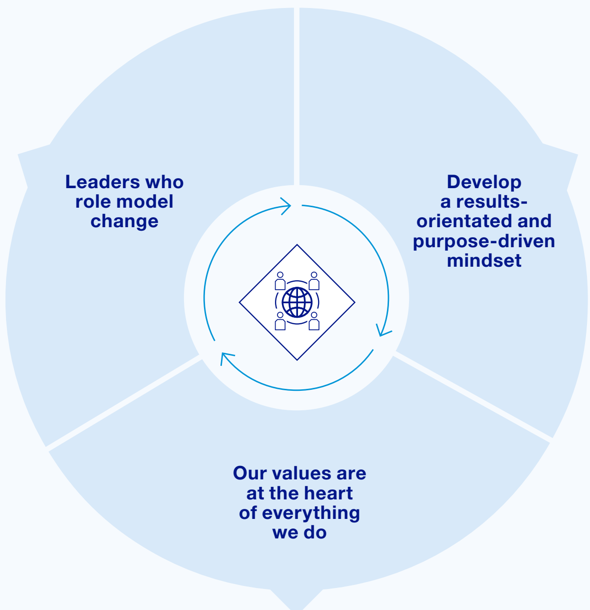
"Do the right thing" means we act safely, inclusively and with integrity. We support and care for each other, and ensure it is safe for colleagues to speak up.

"Find a better way" is all about working as one team to find solutions, embracing learning and new ideas.

"Make it happen" means being bold and acting with passion and purpose, taking ownership to deliver for customers and focusing on progress over perfection.

Our culture

- Change is owned and led by leaders who empower colleagues to make decisions and take ownership
- Measured feedback for all leaders to adjust and align behaviour and increase accountability
- Leaders act safely, inclusively and with integrity



- Greater ownership and accountability
- Deliver at a greater pace for our customers and continue to drive efficiency
- Embrace bold thinking and new ideas
- One team, focused on finding solutions

- Colleagues are recognised for living our new values
- Encourage sharing stories demonstrating how change is taking place; empowering colleagues to challenge and speak up where our values are not being lived
- Our values are instilled into our people, processes, policies and ways of working

Strategic priority

Enable the energy transition for all

Deliver for customers efficiently

Grow our organisational capability

Empower colleagues for great performance

What this means | **2020/21 achievements** | **Looking ahead**

Enable the energy transition for all

What this means

We will **increase the positive impact we make on society**, environmentally and socially, primarily through enabling a transition to a clean energy future. By innovating to decarbonise our networks, investing for a changing climate, and influencing policy and regulation, we will enable clean electricity, heat and transport, and **champion better outcomes for all**; outcomes where skills are developed and where no one is left behind.

Business environment link:

2020/21 achievements

- In the UK, our GT business secured Ofgem innovation funding to deliver FutureGrid – a hydrogen transmission test facility, and announced Project Union, an ambitious plan to develop a UK hydrogen backbone
- In the UK, our ET business has been working alongside the UK electricity distribution companies to support the roll-out of high-power chargers (>150kW) across the motorway network
- The ESO published the Offshore Coordination Project Phase 1 report to facilitate offshore wind's contribution to the net zero target and reduce the environmental and social impact of onshore connections
- US service areas were ranked among the top five states in energy efficiency in the 2020 State Energy Efficiency Scorecard
- National Grid Renewables got approved investment in the 200 MW Prairie Wolf Solar project in Illinois, which is expected to begin operations in 2021

5,147

coal-free hours in the UK in 2020 (3,666 hours in 2019)

Looking ahead

- We will support the decarbonisation of the communities we serve, migrating to cleaner energy solutions across the board
- We will enable a fully decarbonised electricity grid through grid modernisation and increased flexibility, and connect renewables quickly and efficiently
- We will lead the way in the decarbonisation of gas, by investing in a range of solutions like renewable natural gas, blending hydrogen in our networks and carbon offsetting

Deliver for customers efficiently

What this means

Delivering **safe, reliable, resilient and affordable energy for customers in our communities** has always been at the heart of what we do. As we invest to decarbonise the energy system, driving **operational excellence** and **financial discipline** to **keep bills affordable** for customers is more important than ever.

Business environment link:

2020/21 achievements

- Our ET business launched ConnectNow, a one-stop portal for electricity connection customers, which received direct customer satisfaction feedback of 8.8/10
- The ESO launched a new wider access Application Programming Interface that allows smaller providers to interface more easily and cost-effectively with the balancing mechanism
- ISO-New England selected the Ready Path Solution, developed by National Grid and Eversource in the first ever FERC Order 1000 Solicitation in New England, to maintain grid reliability when the Mystic Generating Station retires in 2024

£5bn

investment in energy infrastructure

Looking ahead

- We will continue to deliver safe, reliable and affordable energy for our customers around the clock no matter the weather
- We will do this by driving operational excellence and financial discipline through every part of our business and continuing to build relationships with regulators and policy-makers that strengthen partnerships and unlock added value

Grow our organisational capability

What this means

In the context of a rapidly changing energy sector, we will need to build on and evolve our organisational capabilities. We will **digitally transform** our processes, strengthen our **customer focus**, and sharpen our **commercial edge**. To successfully make this transformation and deliver results, our **ability to implement change effectively** will be paramount.

Business environment link:

2020/21 achievements

- We implemented a new group operating model focusing on six business units across the UK and US to improve the quality of our customer and stakeholder relationships; to evolve our behaviours and ways of working, instilling a culture of ownership and accountability; and to drive a step change in the efficiency and effectiveness of our organisation
- We established an agile transformation office in the UK, which is responsible for accelerating National Grid's transition to agile delivery and enabling teams across the business to deliver rapid, high-quality change
- We designed a new digital product, 'On My Way', for the US electricity field force to receive, update, and close out work digitally in real time. The tool is expected to deliver $8–$13 million in savings

70%

of required artefacts and

50%

of stage gates removed to streamline our software development process

Looking ahead

- We will build strong leadership and teaming capabilities to create a generation of leaders who empower, take accountability and act decisively
- We will create an organisation built on fully accountable business units that optimise delivery for local stakeholders supported by a thin (US/UK) regional layer

Empower colleagues for great performance

What this means

All our people shape the culture and **ways of working** needed to deliver performance and outcomes that will exceed all our stakeholders' expectations including customers, communities, regulators and investors.

Our leaders will empower our people to be at their best at each moment that matters to them. From attracting **diverse talent**, **developing** our people and **recognising great achievement**, we will ensure that our colleagues are engaged and enabled to work towards a clean energy future.

Business environment link:

2020/21 achievements

- Our ONE employee resource group (ERG) was awarded the title of Top Network Group at the 2020 Ethnicity Awards for its support in rolling out education and mandatory training in the UK
- Through the Responsible Business Charter, we committed to achieving 50% diversity in senior leadership and our new talent programmes by 2025
- Chris Cleveland, leader in Safety, Health, Environmental, Assurance Risk and Resilience team in National Grid Metering, has been named as one of the Top 30 future leaders and selected to be on the mentoring programme from Safety4Good outside of National Grid

38.5%

women on our Board and

42.9%

women on our Group Executive Committee

(33% for both women on our Board and our Group Executive Committee in 2019/20)

Looking ahead

- We will embed our purpose, vision and values, and reinforce our new third value 'make it happen'
- We will strategically manage our people; simplify our banding structure to minimise hierarchy and align talent management and reward structures to employee performance

Key performance indicators

The Board uses a range of metrics, reported periodically, against which we measure Group performance. These metrics are aligned to our strategic priorities.

Link to strategy

- Enable the energy transition for all
- Grow our organisational capability
- Deliver for customers efficiently
- Empower colleagues for great performance

A Indicates an alternative performance measure

Link to remuneration
Remuneration of our Executive Directors, and our employees, is aligned to successful delivery of our strategy. We use a number of our KPIs/alternative performance measures as specific measures in determining the Annual Performance Plan (APP) and Long Term Performance Plan (LTPP) outcomes for Executive Directors. While not explicitly linked to APP and LTPP performance outcomes, the remaining KPIs and wider business performance are considered. For further detail, please see our Directors' Remuneration Report, on pages 92 – 113.

Further reading:
You can find out additional detail to support some of these KPIs in our Responsible Business Report. This document can be found by visiting: nationalgrid.com/responsibility

Business-unit-level measures that are specific to our strategic priorities are set out within our Principal Operations review, on pages 40 – 45.

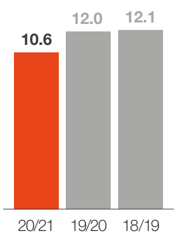
Our non-financial KPIs detailed on pages 21 and 22 do not include data from Geronimo, the National Grid Renewables (NGR) business, acquired in July 2019.

Financial measures

Strategy link | **KPI and performance** | **Progress in 2020/21**

Group Return on Equity (RoE, %) A
We measure our performance in generating value for shareholders by dividing our annual return by our equity base. This calculation provides a measure of whole Group performance compared with the amounts invested in assets attributable to equity shareholders.

Target: 11–12.5% each year

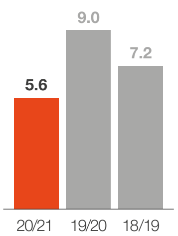


Group RoE of 10.6% was lower than 2019/20 (12.0%), principally due to the impact of COVID-19, higher storms and the retention of the £2 billion Cadent proceeds, which was used to finance asset growth in our US business.

Group RoE in 2018/19 and 2019/20 has been recalculated to reflect the revision to decrease the comparative goodwill balances (see note 1F on page 137 for details).

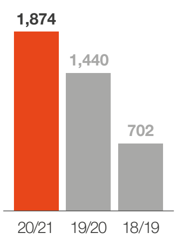
Total regulated asset growth (%) A
Maintaining efficient growth in our regulated assets ensures we are well positioned to provide consistently high levels of service to our customers and increases our future revenue allowances. This includes investment for a changing climate, enabling clean electricity, heat and transport.

Target: 5–7% growth each year



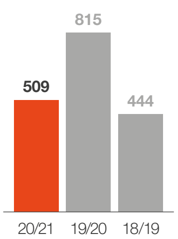
Asset growth during the year was 5.6% (2019/20: 9.0%). This was primarily driven by lower UK RAV growth of 2.2% (2019/20: 3.8%) due to lower inflation and a slower rate of US rate base growth of 8% (2019/20: 12%). Asset growth in 2019/20 included £209 million for the acquisition of NGR in NGV.

Cumulative investment in delivering new low-carbon energy sources (£m)
We invest in new low-carbon energy sources primarily through our interconnector businesses (North Sea Link, IFA2 and Viking Link), investments in and partnerships with, companies delivering low-carbon energy sources (for example, our partnership with Sunrun) and investments into large-scale renewables (for example, our new investment in NGR).



Investment in delivering new low-carbon energy sources decreased by £304m (41%) in 2020/21 compared to 2019/20. This is primarily due to the acquisition of NGR in 2019/20. Excluding the initial investment into the acquisition of NGR of £209 million in 2019/20, investment in new low-carbon sources decreased by around £100 million. This is primarily due to a decrease in interconnectors under construction, investment driven by timing of cable and convertor milestone activity, and lower investment on IFA2 as it became operational in January 2021.

NGV capital investment (£m) A
NGV is focused on investment in a broad range of energy businesses across the UK and US, including our interconnector business, large-scale renewable generation, LNG storage and regasification, and energy metering.



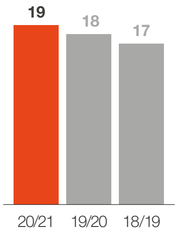
NGV capital investment has decreased year-on-year by £306 million (38%). This is principally due to the acquisition of NGR in July 2019 and a net decrease in interconnectors under construction, investment driven by timing of cable and convertor milestone activity, and lower investment on IFA2 as it became operational in January 2021.

Non-financial measures

Strategy link **KPI and performance** **Progress in 2020/21**

Cumulative low-carbon generation connected to our UK network (GW)

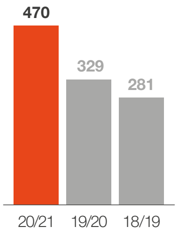
Low-carbon generation supported by our network to date.



A total of 19.0 GW of low-carbon generation is currently connected to our network, following additional offshore wind capacity connecting at Triton Knoll (+360 MW) and Burbo Bank Extension (+4 MW). The government's offshore wind sector deal and continued cost reductions observed in the latest Contracts for Difference (CfD) allocation round, indicate further increases in capacity over the coming years. Additionally, we have seen connections of Tees Renewable Energy Plant (+285 MW of Biomass-fired generation) and increased capacity at Sizewell B Nuclear plant (+7 MW).

Connections of renewable schemes to US electric distribution network (MW)

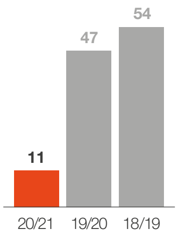
The table represents the amount of customer-owned renewable energy capacity installed on our distribution network across our US footprint. Given the variability and unpredictability of customer-driven projects, the Company does not presently have a MW target. Current targets primarily focus on regulatory compliance and customer need date attainment.



The Company interconnected 470 MW of distributed renewable energy resources in 2020/21 across our service territory, an all-time high and a 37% increase compared to 2019/20. Massachusetts and New York installed a record amount of capacity (207 MW and 177 MW, respectively) and Rhode Island experienced a slight decline in customer-ready projects to interconnect. The Company continues to make progress in Massachusetts and Rhode Island to enable greater renewable energy integration and has completed 637 MW area-wide transmission and distribution studies for non-residential systems and 314 MW was still in progress in 2020/21. While these systems have represented less than 5% volume of connected applications, they have accounted for 78% of the installed capacity over the last three years.

Contribution of our corporate responsibility work (£m)

Working with communities is important for creating shared value.

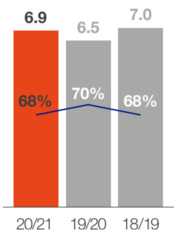


We use the Business for Societal Impact (previously London Benchmarking Group) measurement framework to provide an overall community investment figure which includes education (but excludes investment in university research projects). While we have no specific target, our overall aim is to ensure we add value to society to enable communities to thrive.

In the UK, the overall contribution of our activities was valued at over £3.7 million. In the US, our contribution was just over £7.5 million. This gives us a combined Group-wide contribution of over £11 million. This was lower than prior years because some events were cancelled due to COVID-19.

Climate change – Scope 1 and 2 emissions

This is a measure of our reduction of Scope 1 and Scope 2 emissions of the six primary Kyoto greenhouse gases. Our target is to reduce our greenhouse gas emissions by 80% by 2030, 90% by 2040 and to net zero by 2050, compared with our 1990 emissions of 21.6 million tonnes. The percentages in the adjacent chart reflect a reduction in our emissions from a 1990 baseline.



We seek to continuously improve our environmental performance, in instances going beyond regulatory requirements, through implementation of our ISO 14001-certified Environmental Management System and Environmental Sustainability Standard.

Further reading
You can read more about the Task Force on Climate-related Financial Disclosures and our wider sustainability activities and performance on pages 62 – 66.

Our Scope 1 greenhouse gas emissions for 2020/21 equate to 4.7 million tonnes of carbon dioxide equivalent (2019/20: 3.9 million tonnes) and our Scope 2 emissions (including electricity line losses) equate to 2.2 million tonnes (2019/20: 2.6 million tonnes). This is a total of 6.9 million tonnes of carbon dioxide equivalent for Scope 1 and 2 emissions. These figures include line losses and are equivalent to an intensity of around 467 tonnes per £1 million of revenue (2019/20: 447 tonnes). Our Scope 3 emissions for 2020/21 were 28.9 million tonnes of carbon dioxide equivalent (2019/20: 30.8 million tonnes). In accordance with the greenhouse gas protocol, we have enhanced our measurement of Scope 3 emissions which has resulted in a consistent adjustment to all Scope 3 emissions presented in this report.

Our underlying energy use is 2,602 GWh where the UK and US are responsible for 1,627 GWh and 975 GWh respectively. This excludes fuels consumed for power generation in the US (16,155 GWh) and system losses (11,154GWh).

We measure and report in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol. 100% of our Scope 1, 2 and 3 emissions are independently assured against ISAE 3410 Assurance Engagements on Greenhouse Gas Statements. This data complies with the UK government's Streamlined Energy and Carbon Reporting (SECR) requirements. For further detail, please see page 57.

Network reliability

We aim to deliver reliability by planning our capital investments to meet challenging demand and supply patterns, designing and building robust networks, having risk-based maintenance and replacement programmes, and detailed and tested incident response plans. We measure network reliability separately for each of our business areas. The table below represents our performance across all our networks in terms of availability.

%	2020/21	2019/20	2018/19
UK Electricity Transmission	**99.99997**	99.99997	99.99998
UK Gas Transmission	**100.00000**	99.99960	99.98963
US Electricity Transmission	**99.95429**	99.95511	99.95207
US Electricity Distribution	**99.91977**	99.94242	99.95046
Interconnector availability			
IFA interconnector	**95.4**	91.4	93.9
IFA2 interconnector	**96.5**	–	–
BritNed interconnector	**75.1**	98.6	98.2
NEMO Link interconnector	**99.2**	96.1	–

In both the UK and US, we continued to maintain high levels of reliability on all our networks.

US Electricity Distribution data has been re-stated for years prior to 2020/21, to reflect financial year information in comparison to calendar year.

BritNed suffered two offshore cable faults resulting in the asset being offline from December to February and again in March. The IFA2 interconnector started commercial operations in January 2021.

Key performance indicators
continued

Non-financial measures continued

Strategy link | KPI | Performance | Progress in 2020/21

Customer satisfaction

We measure customer and stakeholder satisfaction, while also maintaining engagement with these groups and improving service levels.

	2020/21	2019/20	2018/19	Target
UK Electricity Transmission (/10)	**8.4**	8.2	7.9	**6.9**
UK Electricity System Operator (/10)	**7.5**	7.6	–	**8.2**
UK Gas Transmission (/10)	**8.2**	8.0	7.8	**6.9**
US Residential – Customer Trust Advice survey (%)	**66.2**	59.8	58.7	**61.6**
Metering NPS score (index)	**+61**	+40	+44	**–**

Our UK customer satisfaction (CSAT) KPI comprises Ofgem's electricity and gas transmission customer satisfaction scores. Figures represent our baseline targets set by Ofgem for reward or penalty under RIIO (maximum score is 10).

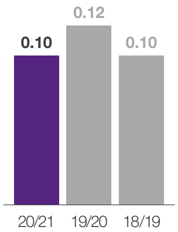
The US metric measures customers' sentiment with National Grid by asking customers their level of trust in our advice to make good energy decisions. The metric, which is tied to the value customers feel they receive from National Grid, has improved over the past year.

NPS scores reported represent the UK metering business.

Group lost time injury frequency rate (LTIs per 100,000 hours worked)

This is the number of worker lost time injuries per 100,000 hours worked in a 12-month period (including fatalities) and includes our employee and contractor population.

Target: < 0.1 LTIs

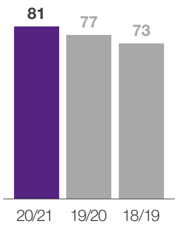


As at 31 March 2021, our Group lost time injury frequency rate (LTIFR) was 0.10, which is in line with the Group target. This is a combined employee and contractor LTI rate, which reflects our continued focus on encouraging good safety behaviours across the entire workforce.

The majority of lost time injuries are a result of individual issues such as slips, trips and falls, and soft tissue injuries from inappropriate tooling, lifting and carrying. We continue to address these and other incidents by implementing best practice injury prevention techniques that mitigate potential for harm factors.

Employee engagement index (%)

This is a measure of how engaged our employees feel, based on the percentage of favourable responses to questions repeated annually in our employee engagement survey. Our target is to increase engagement compared with the previous year.



We measure employee engagement through our employee engagement survey (EES) called Grid: Voice.

Our engagement score was 81%, which is four points ahead of the 2019/20 results.

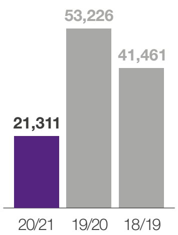
Workforce diversity (%)

We measure the percentage of women and ethnic minorities in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 59).

During 2020/21, the representation of our ethnic minority groups has increased to reflect in-year changes. Prior year data has also been re-stated as a result of a correction that was made in our data systems. We continue to build our diverse talent pipeline.

Education, skills and capabilities (>1 hour interactions)

We support the development of young people's skills and capabilities through skills-sharing employee volunteering. In particular, we focus on STEM subjects as these support our future talent recruitment and our desire to see young people gain meaningful employment.



We measure quality (>1 hour) interactions with young people from all backgrounds on STEM subjects and broader industry skills development. In the UK, in 2020/21, we have had 921 quality interactions with young people in these categories. We had 20,390 interactions in the US. Overall we have seen a total of 21,311 interactions with young people, a decrease of 31,955 resulting from the impacts of the COVID-19 pandemic. Whilst levels of interactions dropped we were able to run some of our skills, training and education initiatives virtually.

Innovation

Our commitment to net zero continues to shape our innovation strategy. Our innovation and Research and Development (R&D) portfolio enables us to identify and target carbon savings for our own operations and we are also developing innovation projects to ensure we are prepared and play a pivotal role in the decarbonisation of energy for power, heat, transport and industry. We place a high value on collaboration to inform, generate ideas and solve the challenges we see ahead of us, and we work with technical organisations, academia and suppliers in the energy sector that align with our goals and objectives.

Innovation in our principal operations

The UK electricity transmission project portfolio has been developed around the themes of delivering cleaner and cheaper energy. We are focused on decarbonising our own operations and have worked on projects investigating ways to eliminate greenhouse gases from our gas-insulated equipment, replacing diesel generators with low-carbon alternatives for backup at our substations and reducing our carbon footprint in relation to our construction work. Our work with Smart Wires (see page 40) looks to use modular power flow control devices to increase renewable power transfer capability on our network. Following stakeholder engagement our research programme has focused on optimised asset management to help deliver cheaper energy as well as the monitoring and digitisation of operational technology, and in particular cyber security. We are aiming to open our Deeside Centre for Innovation to wider industry use in October 2021 as a key enabler for future innovation.

The ESO has delivered a diverse innovation portfolio that supports our role in keeping electricity supplies safe, reliable and efficient, while pushing the boundaries to enable a net zero energy future. Our innovation projects continue to explore how we work in ground-breaking areas such as blockchain and machine learning, as well as state-of-the-art technologies such as Virtual Synchronous Machines. We refresh our strategy and innovation priorities annually, based on consultation with our stakeholders, and this ensures we continue to focus innovation funding only on the most effective projects which can deliver consumer benefits.

Our UK gas transmission business continues to lead our research on transitioning to a hydrogen future. Our Hydrogen in the NTS programme includes hydrogen deblending, allowing for the separation of hydrogen in a natural gas mix, (see also the case study on page 17) and we have been working with the Institute of Gas Engineers and Managers to overhaul the gas technical standards to meet hydrogen specifications as well as securing funding to build a hydrogen test facility from decommissioned assets. Two key projects for methane emissions include developing a fugitive emission detection system and looking at reducing emissions from rotating gas equipment. On asset health innovation, we are developing valve remediation techniques and looking at drone technology for inspection, flying drones beyond visual line of sight to inspect large areas of our network and assets.

In Massachusetts, under the Company's Solar Phase I, II and III programmes, comprising approximately 35 MW of photovoltaics (PV) and 6.2 MW of energy storage, we continue to explore new technologies that can help reduce the interconnection cost and time of solar energy as well as researching how to move from interconnection of distributed energy resource (DER) to integration of it.

In New York, several Reforming the Energy Vision (REV) pilots are underway, testing market solutions in support of demand reduction programmes, smart city opportunities and renewable heating technologies to provide us with the knowledge and experience to evolve our systems for the grid of the future. These projects involve working with customers to manage usage and reduce energy bills and demand during peak times. We are also moving ahead with the procurement of energy storage projects. As part of our Niagara Mohawk rate case, we have proposed a distributed communications project to investigate greater integration of DER into our networks.

In our US gas businesses, our innovation continues to prioritise increasing public safety, protecting our workforce, reducing the cost of the work we perform and reducing our impact on the environment. We have several programmes exploring the introduction of renewable natural gas and alternative low-carbon heating solutions for our customers, as well as blending hydrogen into natural gas distribution systems, as referenced in the case study on page 17.

National Grid Partners

NGP, our corporate investment and innovation arm, continued delivering impact to the Group. Faced with the challenges of COVID-19, NGP focused on activities to keep the Company more secure and resilient by investing in emerging technologies such as artificial intelligence (AI), data security and cybersecurity, and embedding these innovations across our US and UK core operations. NGP's portfolio as at 31 March 2021 comprises 23 companies and four fund investments at a fair value of £178 million.

During the past fiscal year, NGP invested in six new start-ups – AccuKnox, AiDash, Aperio, Copper Labs, Linevision and Panaseer – as well as The Hive, a venture studio that helps entrepreneurs and corporations launch AI start-ups. NGP also led a $110 million Series C round in existing portfolio company Dragos – the most substantial investment ever in industrial control system cybersecurity.

NGP continues to build use cases of its portfolio innovations across our core businesses. In collaboration with NGP portfolio company Urbint, for example, National Grid is using AI to focus our damage prevention resources with increased precision; this has the potential to save millions of dollars annually in avoided damage and to minimise disruption to critical networks.

In July, NGP joined NYSERDA and other corporate and investor partners in sponsoring The Clean Fight New York, which helps scale up clean energy startups and innovators throughout New York State. Additionally, NGP launched the NextGrid Alliance (NGA), a consortium of 60+ utilities where best practices and technology innovations are shared. NGP held the inaugural NGA meeting in September and has been heads-down since then, working on issues like modernising utility infrastructure and keeping power grids safe from cyber threats. Later this year, NGP plans to host its first NGA Summit in the UK as part of COP26.

Also in 2020, NGP's Innovation team created a dashboard that, for the first time, tracks company-wide innovation efforts of all stages and sizes using common criteria. A three-member Innovation Reporting team devised the dashboard to help senior leadership better prioritise innovation and quantify its impact on the bottom line. The team engaged with more than 100 stakeholders and identified 399 discrete innovation activities. This new approach to innovation will be updated every six months to help leaders see trends across the organisation and seek out areas of collaboration.

NGP will continue to deliver strategic and financial value to our core businesses and looks forward to delivering on our mandate to invest in valuable startup technologies; tackling innovation and business development projects that can improve our company performance; and acting as a catalyst for change across the broader Group.

More details can be found at ngpartners.com including details of each of our portfolio investments.

Scan here to view our story

Strategy in action

Case study – Spot the robot dog

At National Grid we're always looking to the future, exploring new innovations and efficient ways of working, while ensuring our employees stay safe. Spot the robot dog is part of the new guard, conducting essential safety inspections at one of our US electricity substations.

Further reading
Further details about our R&D and innovation activities can be found in Additional Information on pages 247 – 249.

Internal control and risk management

The Board is committed to protecting and enhancing our reputation and assets, while safeguarding the interests of our shareholders.

Managing our risks

National Grid is exposed to a variety of uncertainties that could have a material adverse effect on the Group's financial condition, our operational results, our reputation and the value of our shares.

The Board oversees the Company's risk management and internal control systems. As part of this role, the Board sets and monitors the amount of risk the Company is prepared to seek or accept in pursuing our strategic objectives – our risk appetite. The Board assesses the Company's principal risks and monitors the risk management process through risk review and challenge sessions twice a year.

Risk management process

Overall risk strategy, policy and process are set at Group level with implementation owned by the business. Our Enterprise Risk Management (ERM) process provides a framework through which we can consistently identify, assess, prioritise, manage, monitor and report risks. The process is designed to support the delivery of our vision, strategy and business model as described on pages 2 – 7. During 2020/21 a Group-wide transformation programme has driven further improvements in the risk and controls framework, focusing on quality and completeness of risk and controls, increased capability and accountability within the business and effective assurance activities.

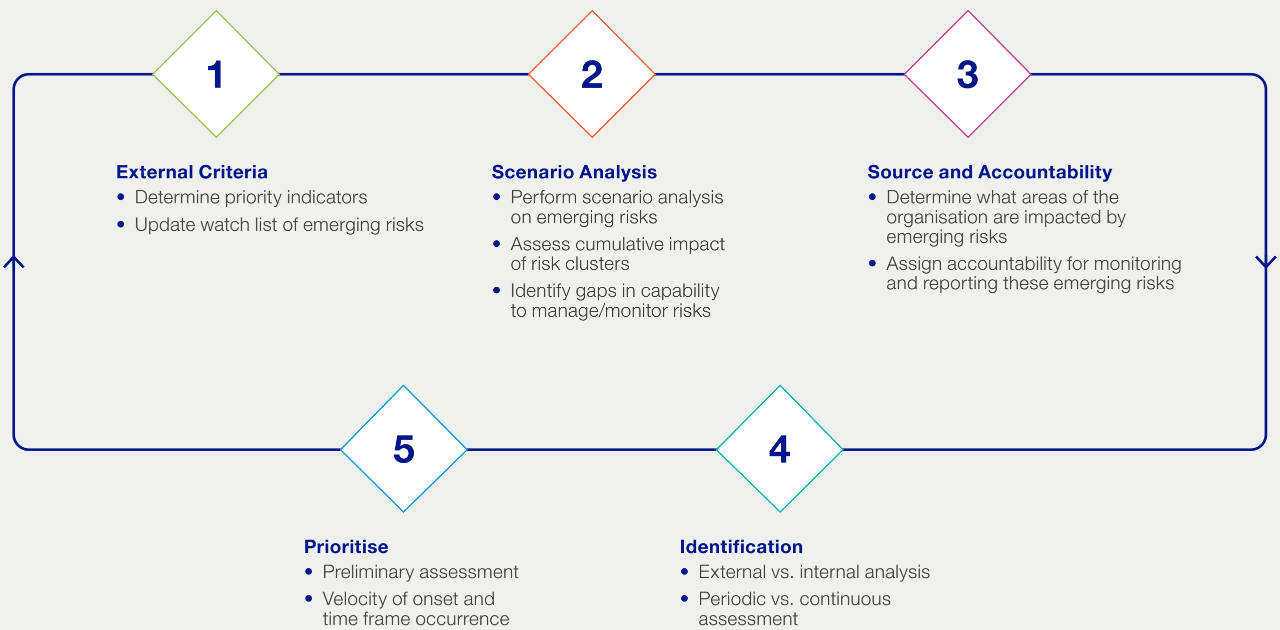
Our corporate risk profile contains the principal risks that the Board considers to be the main uncertainties currently facing the Group as we endeavour to achieve our strategic objectives. These top risks are agreed through discussions on the Group's risk profile with the Group Executive Committee and the Board. The risks are reported and debated with the Group Executive Committee and the Board every six months.

When determining what our principal risks should be, a broad range of factors are considered. We test principal risks annually to establish their impact on the Group's ability to continue operating and to meet its liabilities over the assessment period. We test the impact of these risks on a reasonable worst-case basis, alone and in clusters, over a five-year assessment period. This work informs our viability statement (see pages 28 – 29). The five-year period was carefully considered in light of the nature of our businesses, our business planning cycles, and risk profile. The Board considered that this period remained appropriate for our stable regulated business model. The Board and Group Executive Committee discuss the results of the annual principal risk testing at the end of the year.

Top-down, bottom-up assessment

Risk management activities take place through all levels of our organisation. Through a 'top-down, bottom-up' approach, all business areas identify the main risks to our business model and our business objectives. For each risk the effectiveness of our internal controls is assessed when calculating the financial, operational and reputational impacts, and how likely the risk is to materialise. Where current risk levels are outside of agreed target scores and our risk appetite, the business area identifies and implements actions to close the gap. These are collated and reported at functional and regional levels on a regular cadence. The most significant risks for the UK, US and NGV businesses are highlighted in regional risk profiles. Additionally, the Group Executive Committee and the Board may also identify and assess other principal risks. These risks and any associated management actions are cascaded through the organisation as appropriate.

Continuous cycle to identify and manage emerging risks:



Emerging risks

We have an established process to identify and monitor emerging risks. The process is designed to ensure adequate steps are taken to prevent the occurrence or manage the impact of surprises.

The ERM process monitors management information from a wide variety of internal and external sources when considering emerging risks.

Changes during the year

The Company's risk profile has been developed drawing upon the most significant risks across our business profiles. In March 2021, we announced our agreement to acquire WPD, sell our Rhode Island business, along with our intention to sell a majority stake in the UK GT business; these transactions will strategically pivot our UK business portfolio towards electricity. A failure to generate the anticipated value from the successful integration of WPD, separation of Rhode Island, and the intended sale of a majority stake in the UK GT business has been added as a new principal risk. 11 principal risks are now carried at Group Executive Committee and Board level as detailed below. All principal risks were reviewed at least twice across the year, including an assessment of the key controls, the Key Risk Indicators (KRIs), risk scores, alignment to risk appetite, and future mitigation actions.

In 2020/21, we developed new ways of working to deal with the significant impact of the COVID-19 pandemic across our operations. We have continued to deliver our critical services, minimising the impact to our customers and reducing the risk to our workforce with new COVID-19 operating procedures and controls. We have continually assessed its impact on our workforce, finances and all aspects of our operations, with regular reports provided to the Board. The risk associated with regulatory outcomes has reduced in the UK with the final determinations from RIIO-2. We have accepted the ESO's RIIO-2 package; for the ET and GT businesses we are broadly accepting most of the package but have submitted a technical appeal to the CMA on the cost of equity and outperformance wedge. Outside of the CMA appeal, the UK business is now focused on successfully delivering against the new RIIO-2 price controls.

The operating environment in New York (NY) continues to present risk and challenges. The Company continues to execute and comply with the settlement entered in November 2019 that resolved the Order to Show Cause issued following the moratorium in downstate NY. The independent monitor appointed pursuant to that settlement continues to oversee compliance with the settlement and gas supply operations. Following significant storms and delays in restoration efforts for other utilities in NY, significant legislation has been proposed that would require reimbursements to customers, result in increased penalties, and impose storm preparation and restoration requirements among other things. Positively, the Company has reached an agreement in principle with Department of Public Service (DPS) Staff regarding the KEDNY and KEDLI rate cases and Niagara Mohawk Power Corporation settlement negotiations are progressing to plan. Regulatory scrutiny in Rhode Island (RI) continues to increase, with particular focus and scrutiny on cost recovery and gas supply plans. The final audit report for the Massachusetts (MA) Management Audit, conducted by FTI Consulting Co., was issued on 29 March 2021 and there are no significant new issues and the recommendations are largely constructive. The MA Management Audit encompassed all National Grid MA businesses including Massachusetts Electric, Boston Gas, and New England Power (NEP). MA has issued material clean energy policy statements and the Company is working collaboratively to respond.

Our principal risks and uncertainties

Accepting that it is not possible to identify, anticipate or eliminate every risk that may arise, and that risk is an inherent part of doing business, our risk management process aims to provide reasonable assurance that we understand, monitor and manage the main uncertainties that we face in delivering our objectives. This aim includes considering inherent risks, which in turn exist because of the nature of day-to-day operations in our industry, including financial risks, which exist because of our financing activities. Our principal risks, and a summary of actions taken by management, are provided in the table below. We have provided an overview of the key inherent risks we face on pages 236 – 238, and specifically our key financial risks, which are incorporated within note 32 to our consolidated financial statements on pages 190 – 202. Risk trends reported below take into account controls, any additional mitigation actions and may be influenced by internal or external developments.

People risks

It is through the high-quality work of our employees that we will achieve our vision, respond to the changing needs of our stakeholders and create a competitive advantage. Building and fostering an engaged and talented team that has the knowledge, training, skills and experience to deliver our strategic objectives is vital to our success. We must attract, integrate and retain the talent we need at all levels of the business. These risks link to our strategic priority to 'Empower colleagues for great performance'.

Risks	Actions taken by management
There is a risk of failure to build capability and leadership capacity (including effective succession planning) required to deliver our vision and strategy. ***Risk trend: Neutral (19/20 Neutral)** * Risk trends are assessed to include any external factors outside our control as well as the strength and effectiveness of our controls and additional mitigations as reviewed by management up to 31 March 2021.	We have embedded strategic workforce planning in our US and UK organisations. This process helps to effectively inform financial and operational business planning, as well as human resourcing needs. Our entry-level talent development schemes (graduate training and apprenticeships) are a potential source of competitive advantage in the marketplace. We are involved in a number of initiatives to help secure the future engineering talent we require, including the UK annual residential work experience week and the US Pipeline and Graduate Development Programmes. We also continue to develop the rigour of our succession planning and development planning process, particularly at senior levels. It is now being applied deeper into the organisation as well as continued attention in relation to the ethnic diversity of both our management and field force population. There are multiple activities underway to drive this agenda, including 'neutral' talent and selection processes, development interventions and a global review of our inclusion and diversity strategy and resources including the appointment of a Chief Diversity Officer during the year.

Financial risks

While all risks have a direct or indirect financial impact, financial risks are those which relate to financial objectives and performance. Financial risk management is a critical process used to make investment decisions and aims to maximise investment returns and earnings for a given level of risk.

Our key financial risks are described in note 32 to our financial statements on pages 190 – 202.

Internal control and risk management
continued

Strategic and regulatory risks

Strategic risk is the risk of failing to achieve the Company's overall strategic business plans and objectives, as well as failing to have the 'right' strategic plan. We intentionally accept some risk so we can generate the desired returns from our strategy.

Management of strategic risks focuses on reducing the probability that the inherent risk would materialise, while improving the Company's ability to effectively respond to the risk should it occur. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. These risks link to our strategic priorities of 'enable the energy transition for all' and 'deliver for customers efficiently'. The political climate and policy decisions of our regulators were key considerations in assessing our risks.

The climate change related risk is classed as a strategic and regulatory risk but is also an operational risk, in particular as regards weather-related events in the northeastern US (where storm planning and preparation are key to what we do), flood defence in both the UK (where flood resilience works are being developed) and the US (where flood contingency plans are in place) and the investigation of the impact of rising temperatures and widening temperature ranges on the performance and operation of our networks.

Risks	Actions taken by management
There is a risk that we fail to identify and/or deliver upon actions necessary to address the physical and transitional impacts of climate change on our business and demonstrate our leadership of climate change within the energy sector. **Risk trend: Neutral (19/20 Increasing Risk)**	Putting in place measures to: • evolve our environmental sustainability metrics to better reflect our strategy, measure our impact and track our progress; • address our greenhouse gas (GHG) emissions and deliver on our sustainability commitments, including net zero by 2050, hosting our first environmental, social and governance (ESG) investor seminar, including the publishing of our Responsible Business Charter setting out what responsibility means for us and our commitments and ambitions over the coming years; annual progress will be reported in our inaugural Responsible Business Report to be published in June 2021; • advocate for legislative and policy changes that advance decarbonisation, while proposing and delivering actions in the regions we operate to accelerate decarbonisation for the public and our customers. This work is wide-ranging from system improvements to supporting renewable generation connections, electric vehicle (EV) proposals, oil to gas/electricity heat conversions, energy efficiency, interconnectors, thought leadership and investment in new and emerging areas. Note that a number of the above measures also address the physical impacts of climate change on our operations; • address physical impacts through flood contingency plans, winter preparedness planning, and storm hardening; and • regularly assess the potential range of net zero pathways and future impact on our gas assets, including evaluation of new and evolving technologies and alternative fuel sources (e.g. hydrogen). We have committed to full compliance with the Task Force on Climate-related Financial Disclosures (TCFD) requirements including physical and transitional scenario analysis (see pages 61 – 66). Ongoing work to address transition risks and opportunities includes: • ensuring our electricity network is reliable and able to actively support and contribute to a future where renewables and intermittency of supply are increasing; • supporting the charging infrastructure required for increased use of EVs; • promoting energy efficiency programmes for customers in the US; • facilitating decarbonisation in the US and UK including zero-carbon operation of the GB electricity system through ESO in the UK; and • continuing work on programmes to develop skills in our current and future workforce.
There is a risk that we fail to influence future energy policies and secure satisfactory regulatory agreements. **Risk trend: Neutral (19/20 Increasing Risk)**	In both the UK and the US, we strive to maintain a good understanding of the regulatory agenda and emerging issues, so that robust, public interest aligned responses can be selected and developed in good time. Our reputation as a competent operator of important national infrastructure is critical to our ability to do this. We have plans and governance structures in place to address specific issues such as RIIO-2 and US rate case filings. Ongoing work to support our regulatory relationships includes: • our internal teams focused on activities around gas capacity, large-scale renewables, utilities of the future and EVs; • research and development on the role of hydrogen as a substitute for natural gas; • establishment of US and UK Regulatory Steering Committees; and • increased focus on understanding the needs and expectations of all our stakeholders through regulatory relationship surveys, investor surveys and review of media sentiment.
There is a risk of reputational damage because we fail to respond to shifts in societal and political expectations and perceptions. **Risk trend: Increasing due to current political environment (19/20 Increasing Risk)**	Processes and resources are in place to review, monitor and influence perceptions of our business and our reputation by: • enhancing and consolidating our digital roadmap and social channels; • developing an internal forum to increase management of stakeholder and media reputational issues; • delivering on our commitment to be a responsible business (see pages 52 – 60); and • promoting partnerships and discussions of decarbonisation across the jurisdictions where we operate. Considerations on emerging risks such as the economic downturn due to COVID-19 impacts and mergers and acquisitions (M&A) strategies have also been addressed as part of financial and reputational impact assessments. These processes, along with twice-yearly Board strategy discussions, are reviewed regularly to ensure they continue to support our short- and long-term strategy. We regularly monitor and analyse market conditions, competitors and their potential.
There is a risk that we fail to adequately anticipate, respond to, minimise the impact or take advantage because of disruptive forces such as technology and innovation. **Risk trend: Neutral (19/20 Neutral)**	NGP, our central innovation function, leads our strategy with regards to new technology and monitoring disruptive technology and business model trends, acting as a bridge for emerging technology into the core regulated businesses and business development teams. In addition, NGP is investing in emerging startup companies and venture funds, and the NGV function will further the focus on new strategies, business development and technology and innovation.

There is a risk that we fail to generate anticipated levels of value from the WPD integration, Rhode Island separation and intended sale of a majority stake in the UK GT business. **Risk trend: N/A (New this year)**	• Extensive pre-transaction due diligence undertaken on WPD • Both transactions evaluated to assess alignment to overall strategic objectives • A discrete WPD integration plan established and is being overseen by new internal governance procedures • Post-acquisition performance will be monitored and assessed • Highly capable sale and separation teams established for the UK GT business disposal • Extensive separation plans are being developed for the Rhode Island and UK GT businesses, based on our experience from the disposal of Cadent in 2016/17.

Operational risks

Operational risks relate to the losses resulting from inadequate or failed internal processes, people and systems, or due to external events. These risks normally fall within our low-risk appetite level as there is no strategic benefit from accepting the risk, as it will not be in line with our vision and values.

Our operational principal risks have a low inherent likelihood of occurring. However, should an event occur, without effective prevention or mitigation controls, it would be likely to have a high level of impact. The risk owners, executive leaders, and their teams develop and monitor actions to control the risks. Operational risks are managed through policy, standards, procedure-based controls, active prevention and monitoring. The operational risks link to our strategic priority to 'Deliver for customers efficiently'. Principal risk assessment includes reasonable worst-case scenario testing i.e. gas transmission pipeline failure, loss of licence to operate, cyber security attack – and the financial and reputational impact should a single risk or multiple risks materialise.

Risks	Actions taken by management
There is a risk that we fail to prepare and respond to significant disruptive factors caused by the COVID-19 pandemic. **Risk trend: Decreasing**	The COVID-19 pandemic impacted multiple areas of our business, and we responded with a comprehensive plan, supporting the safety of our workforce and customers. • As vaccinations are rolled out across the UK and the US we are carefully assessing the risk, alongside relevant regulations and guidelines to determine the impact on our operations, and the implementation of transition plans to reopen our offices to non-operational employees. • Throughout 2020/21 we have actively monitored effects on our people, operations, strategic objectives, regulatory and political engagement, and financial implications. Our approach has been proactive to ensure our business can continue to serve its customers appropriately.
A catastrophic cyber incident caused by the abuse of our digital systems because of a malicious action by an external or internal party. **Risk trend: Increasing due to the dynamic nature of the cyber security threat (19/20 Increasing)**	We are committed to providing secure and resilient services and continue to commit significant resources and financial investment to maintain the security of our systems and our data. Our approach is holistic and includes: • close partnerships with UK and US government agencies including the Department for Business, Energy and Industrial Strategy (BEIS), the Centre for Protection of National Infrastructure (CPNI), The Department of Energy and the Department for Homeland Security. To understand risks and collaborate on risk management activities; • utilisation of good practice frameworks including the National Institute of Standards and Technology Cyber Security Framework to ensure National Grid can identify, protect, detect, respond and recover from cyber security threats; and • a strong focus on compliance with our regulatory obligations including the European Union (EU) Directive on Security of Network and Information Systems Regulation (NIS-R) and US North American Electric Reliability Corporation critical infrastructure protection (NERC CIP).
There is a risk of a catastrophic asset failure resulting in a significant safety and/or environmental event. **Risk trend: Neutral (19/20 Neutral)**	We continue to focus on risk mitigation actions designed to reduce the risk and help meet our business objectives; including: • putting a Group-wide process safety management system in place to make sure a robust and consistent framework of risk management exists across our higher hazard asset portfolio, with safety-critical assets clearly identified on the asset register; • implementing asset management and data management standards with supporting guidelines to provide clarity around what is expected, with a strong focus on what we need in place to keep us safe, secure and legally compliant; and • in support of this, we have an established capability framework to make sure our workforce have the appropriate skills and expertise to meet the performance requirements in these standards.
There is a risk that we fail to predict and respond to a significant disruption of energy. **Risk trend: Increasing (19/20 Increasing)**	We continue to apply a holistic approach encompassing preventative and mitigating actions including pre-emptive measures to maintain network reliability such as: • flood contingency plans for substations; • system operator supply and demand forecasting; • our UK GT Winter Preparedness Plan; • US gas mains replacement programmes; • US storm hardening programme; and • diversity of suppliers in our US gas procurement. Should energy flow disruptions occur: • business continuity and emergency plans are in place and practised, including Black Start testing; and • critical spares are maintained to ensure we can quickly and effectively respond to a variety of incidents – storms, physical and cyber-related attacks, environmental incidents and asset failures. • The ESO considered the significant impact on the UK power networks on responding to the unprecedented decrease in energy consumption and demand during the COVID-19 restrictions.
There is a risk of failure to adequately identify, collect, utilise and keep private the physical and IT data required to support company operations and future growth. **Risk trend: Neutral (19/20 Decreasing)**	Controls for our IT processes have been redefined and are aligned to the National Institute of Standards and Technology (US) and the Network Information Framework and System Regulations (UK). We continue to progress and improve our data management processes including: • implementation of our data and other related business management standards; • privacy impact assessments carried out across business areas affected by General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA) legislation; • data governance councils for UK and US regions; and • increased levels of data leadership and capability with the recruitment of a Chief Data Officer and establishment of an associated function. The increase of home-working due to COVID-19 has led to new protocols for data handling and restrictions around data distribution.

Viability statement

The Board's consideration of the longer-term viability of the Company is an extension of our business planning process. The process includes financial forecasting, a robust risk management assessment, regular budget reviews as well as scenario planning incorporating industry trends, considering any emerging issues and economic conditions. Our business strategy aims to enhance our long-term prospects by making sure our operations and finances are sustainable.

Utilising our established top-down/bottom-up risk management framework, the principal risks facing the Company as described on pages 24 – 27 are identified, monitored and challenged. The Board considers the preventative and mitigating controls and risk management actions in place and discusses the potential financial and reputational impact of the principal risks against our ability to deliver the Company's business plan. Specifically, the Board considers the principal risks shown in the table below in detail.

The assessment of the potential impact of our principal risks on the longer-term viability of the Company tests the significant solvency and liquidity risks involved in delivering our business objectives and priorities. After careful consideration of the risk landscape and other considerations including: our long-term business model; high-quality, long-term assets and stable regulatory arrangements; the Board's stewardship responsibilities; and the Company's ability to model a range of severe but plausible reasonable worst-case scenarios, the Board concludes that it remains appropriate to consider a five-year timeframe over which we should assess the long-term viability of the Company.

Operational impacts

Scenario 1 – A significant cyber-attack.

Scenario 2 – Significant supply disruption event occurring in the US leading to loss of licence.

Scenario 3 – A significant process safety gas pipeline failure in the US.

Scenario 4 – Significant physical damage due to climate change event, along with a failure to meet stakeholder expectations on our climate commitments.

Performance impacts

Scenario 5 – The breach of personal data information.

Scenario 6 – Poor outcome of future US rate case filings, and low performance under RIIO-2.

Scenario 7 – A breach of compliance rules for onshore competition in electricity transmission by NGET. NY legislation and political relationships leading to loss of NY licences.

Scenario 8 – Inability to recover US COVID-19 related bad debts through future regulatory agreements.

Scenario 9 – Anticipated value from our business acquisition and disposals is not fully realised.

Cluster impacts

Scenario 10 – A significant cyber-attack, resulting in a significant data breach and a catastrophic asset failure, causing a significant disruption of energy supply, leading to loss of operator licence for our NY Gas business.

The following factors have been taken into account in making this decision:

- we have reasonable clarity over a five-year period, allowing an appropriate assessment of our principal risks to be made;
- in order to test the five-year period, the Board considers whether there are specific, foreseeable risk events relating to the principal risks that are likely to materialise within a five- to ten-year period, and which might be substantial enough to affect the Company's viability and therefore should be taken into account when setting the assessment period. No risks of this sort were identified; and
- each principal risk was considered for inclusion within the testing and, where appropriate, a reasonable worst-case scenario was identified and assessed for impacts on operations and/or financial performance over the five-year assessment time period as detailed below.

National Grid entered into a series of business acquisition and disposal agreements prior to year end that are yet to be finalised: these include the proposed acquisition of WPD in the UK, the disposal of our Rhode Island business in the US, and we announced our intention to initiate the sale of a majority stake in our UK GT business. We have considered these future transactions during our risk testing and our viability assessment and do not believe they impact the Company's viability or the risk testing scenarios for 2020/21. The transactions support the future delivery of our strategic priorities. Our financial and operational diligence has shown that the performance, management, values and culture of WPD are closely aligned to the existing National Grid group. The transactions are subject to various shareholder and regulatory approvals.

In addition to testing individual principal risks, the impact of a cluster of the principal risks materialising over the assessment period was also considered. For our theoretical reasonable worse-case scenario on risk clusters we identified a scenario of a significant cyber-attack, resulting in a significant data breach and a catastrophic asset failure, causing a significant disruption to our energy supply, that in turn causes us to lose our NY Gas business operator licenses. For this scenario we have assumed it occurs in the US and the cascade of risks occurs within our US Gas business.

The reputational and financial impacts for each scenario were considered. The principal risks relating to leadership capacity and disruptive forces were not tested, as the Board did not feel they would threaten the viability of the Company within the five-year assessment period.

The Board assessed our reputational and financial headroom and reviewed principal risk testing results against that headroom. The testing of the risk cluster also included an assessment of the impact upon the business plan. No principal risk or cluster of principal risks was found to have an impact on the viability of the Company over the five-year assessment period. Preventative and mitigating controls in place to minimise the likelihood of occurrence and/or financial and reputational impact are contained within our assurance system.

In assessing the impact of the principal risks on the Company, the Board has considered the fact that we operate in stable markets and the robust financial position of the Group, including the ability to sell assets, raise capital and suspend or reduce the payment of dividends.

Each Director was satisfied that they had sufficient information to judge the viability of the Company. Based on the assessment described above and on pages 24 – 27 the Directors have a reasonable expectation that the Company will be able to continue operating and meet its liabilities over the period to May 2026.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Catastrophic cyber security incident: catastrophic cyber security breach of business, operational technology and/or Communications, Navigation and Identification (CNI) systems/data.	**Scenario 1** – A terror-related cyber-attack. Included in the risk cluster testing of **Scenario 9.**	**The Board reviewed and discussed cyber security reports in:** • July 2020; and • December 2020. • Cyber security training was also delivered in June and December 2020.
Significant disruption of energy: failure to predict and respond to a significant disruption of energy that adversely affects our customers and/or the public.	**Scenario 2** – Significant supply disruption event occurring in US leading to loss of license. Included in the cluster testing of **Scenario 9**.	**Two Board Strategy sessions were held during the year covering:** • bi-annual overviews; • reviews of the gas business strategy; • external reviews of operational issues within the US Gas business; and • review of the sequence of events that resulted in the partial UK power outage on Friday 9 August 2019.

Principal risk	Viability scenario	Matters considered and overseen by the Board
Safety or environmental incident (asset failure): catastrophic asset failure resulting in a significant safety and/or environmental event.	**Scenario 3** – A significant process safety gas pipeline failure in the US. Included in the cluster testing of **Scenario 9**.	**The Board reviewed and evaluated the current safety performance of the Company at each meeting during the year. In addition:** • safety is a fundamental priority and is discussed in detail by the Safety, Environment and Health Committee (SEH Committee) who have delegated authority from the Board; and • our Electricity and Gas Engineering Reports to the SEH Committee also provide progress updates on our asset management improvements.
Data Management: failure to adequately identify, collect, use and keep private the physical and digital data required to support Company operations and future growth.	**Scenario 5** – The breach of personal data information. Included in the cluster testing of **Scenario 9**.	**Data Management is a principal risk discussed by the Board at least annually, as well as:** • bi-annual updates on the Company's information systems.
Capability and leadership: failure to build sufficient leadership capability and capacity (including succession planning) required to deliver our vision and strategy.	N/A	**Capability and Leadership is an integral part of the Board's vision and strategy. The Board's approach included:** • bi-annual updates on people matters; • considered capabilities to support the delivery of strategic priorities; and • Nominations Committee: considers the structure, size and composition of the Board and committees and succession planning. It identifies and proposes individuals to be Directors and establishes the criteria for any new position.
Political and societal expectations and perceptions: failure to deliver any customer, investor and wider stakeholder propositions due to increased political and economic uncertainty.	**Scenario 7** – A breach of compliance rules for onshore competition in electricity transmission by NGET. NY legislation and political relationships leading to loss of NY licenses. Included in the cluster testing of **Scenario 9**.	**The Board received updates and reviews of:** • the impact of Hard Brexit and access to the Internal Energy Market; • implementation of measures to strengthen ability to obtain fair price for UK assets if potential threat of state ownership materialised; and • UK and US regulatory strategies. These scenarios were evaluated for potential impact on the business.
Satisfactory regulatory outcomes: failure to influence future energy policy and secure satisfactory regulatory agreements.	**Scenario 6** – Poor outcome of future US rate case filings, and low performance under RIIO-2.	**The Board received updates and performed reviews of:** • US regulatory strategy; • UK regulatory strategy; • UK ESO regulatory strategy; • key regulatory policy issues for 2019/20; and • RIIO-2.
Adverse impact – disruptive forces: failure to respond to the asset failure resulting in a significant safety and/or environmental event.	N/A	**The Board evaluated:** • bi-annual updates from National Grid Partners in April 2020 and November 2020; and • Board strategy sessions that considered digital strategy as well as technology and innovation.
COVID-19: failure to respond to disruptive factors caused by the COVID-19 pandemic resulting in an impact on our networks, our people and our financial targets.	**Scenario 8** – Inability to recover US bad debt through future regulatory agreements.	• Board briefings including a weekly update from the Chief Executive (CEO) and Chief Financial Officer (CFO) on our crisis management response; • COVID-19 updates on operational issues, people absences and wellbeing to the Board; and Finance Committee consideration of liquidity; • review of our Business Continuity Planning response and effectiveness of the Crisis Management controls to the SEH Committee; and • briefings from the CFO and finance team on possible financial impacts including a range of scenario modelling and planning.
Climate Change: failure to respond to physical and transitional impacts of climate change and demonstrate our leadership within the energy sector.	**Scenario 4** – Failure to deliver on our climate commitments.	• Board briefings reviewing our sustainability metrics to reflect and track our impact and progress; • committed to reduction of Scope 1 and 2 emissions – 80% by 2030, 90% by 2040 and to net zero by 2050; • committed to reduction of carbon emission (Scope 3) – 37.5% by 2033/34; • reviewed and approved the publication of the Responsible Business Charter; and • disclosures with TCFD including physical and transitional scenario analysis.
Transaction Value: failure to generate anticipated levels of value from the integration of WPD, the separation of Rhode Island and the intended sale of a majority stake in the UK GT business.	**Scenario 9** – Anticipated value from our business acquisition and disposals is not fully realised.	• Board briefings on pre-acquisition due diligence of WPD; • Board assessed the transactions against pre-determined performance, operational, and financial measures and for strategic alignment; and • reviewed and approved the transactions.

Financial review

Summary of Group financial performance

Performance management framework

In managing the business, we focus on various non-IFRS measures which provide meaningful comparisons of performance between years, monitor the strength of the Group's balance sheet as well as profitability and reflect the Group's regulatory economic arrangements. Such alternative and regulatory performance measures are supplementary to, and should not be regarded as a substitute for, IFRS measures, which we refer to as statutory results. We explain the basis of these measures and, where practicable, reconcile these to statutory results in 'Other unaudited financial information' on pages 250 – 259.

Specifically, we measure the financial performance of the Group from different perspectives:

- **Capital investment and asset growth:** Currently we expect to invest c. £5 billion per year.
- **Accounting profit:** In addition to statutory IFRS measures we distinguish between adjusted results, which exclude exceptional items and remeasurements, and underlying results, which further take account of: (i) volumetric and other revenue timing differences arising from our regulatory contracts; and (ii) major storm costs, which are recoverable in future periods, neither of which give rise to economic gains or losses. In doing so, we intend to make the impact of such items clear to users of the financial information in this Annual Report.
- **Economic profit:** Measures such as Return on Equity (RoE) and Value Added take account of the regulated value of our assets and of our regulatory economic arrangements to illustrate the returns generated on shareholder equity.
- **Balance sheet strength:** Maintaining a strong investment grade credit rating allows us to finance our growth ambitions at a competitive rate. Hence, we monitor credit metrics used by the major rating agencies to ensure we are generating sufficient cash flow to service our debts.

This balanced range of measures of financial well-being informs our dividend policy, which from 2021/22 is to grow the dividend per share at least in line with rate of CPIH each year.

Assessment of the estimated impact of the COVID-19 pandemic on the Group's position and results

The COVID-19 pandemic has adversely impacted our reported results in 2020/21. We have experienced a more significant impact in our US businesses than in our UK businesses, mainly due to our large US customer base. During 2020/21, we made a further provision for bad and doubtful debts of approximately £179 million (2019/20: £117 million) in respect of COVID-19. The higher US charge reflects the impact of moratoriums in response to regulatory instructions as requested by regulatory authorities in the US states in which we operate, along with other macroeconomic factors, which limited our ability to collect outstanding debts. We remain committed to continuing to supply our customers, debt collection activities have been curtailed and termination of customer connections has been cancelled.

Our revenues suffered an adverse impact of £78 million, mainly the suspension of late payment fees in the US, lower UK incentives and lower 'hardship recoveries' in Massachusetts, due to fewer US customers re-certifying 'protected status' due to the moratoriums on disconnections. In our underlying results, we have recognised some additional revenue in the US related to allowances for recovery of some of the bad debts through regulatory mechanisms already in place. Incremental COVID-19-related costs of £97 million (2019/20: £10 million), mainly in the US, have been incurred related to enabling safe working (PPE, cleaning, sequestering staff, IT for remote access) and costs associated with delays to a number of planned capex works, as a direct consequence of the pandemic. These incremental costs were partly mitigated by £69 million of cost savings as a result of customer-facing workplan reductions, the pause in collections activities and lower travel and other costs.

In NGV & Other, the pandemic has not caused a significant adverse impact on financial performance in 2020/21, but the disruption from COVID-19 has caused some delays, resulting in £50 million lower than planned capital investment in 2020/21.

For 2021/22, we expect some continuing impact, driven largely by our US operations where we are expecting further risk of bad debt, although lower than we have experienced in 2020/21 and 2019/20. Given our regulatory mechanisms and precedents, we expect to recover a large part of the total bad debt arising as a result of COVID-19. We continue to work with regulators to provide support to our customers. This may lead to cash flow impacts in 2021/22. While COVID-19 may continue to impact earnings and cash flow in the short term, we currently anticipate limited economic impact longer term. However, there could be a range of impacts on cash flows and earnings, which could be different from our current assessment.

Summary of Group financial performance for the year ended 31 March 2021

Financial summary for continuing operations

£m	2020/21	2019/20	Change
Statutory results:			
Operating profit	**2,895**	2,780	4 %
Profit after tax	**1,641**	1,274	29 %
Earnings per share (pence)	**46.6 p**	36.8 p	27 %
Dividend per share (pence), including proposed final dividend	**49.16 p**	48.57 p	1 %
Capital expenditure	**4,931**	5,079	(3)%
Alternative performance measures:			
Underlying operating profit	**3,283**	3,454	(5)%
Underlying profit after tax	**1,911**	2,015	(5)%
Adjusted earnings per share (pence)	**46.4 p**	55.2 p	(16)%
Underlying earnings per share (pence)	**54.2 p**	58.2 p	(7)%
Underlying dividend cover	**1.1**	1.2	(0.1)
Capital investment	**5,047**	5,405	(7)%
Retained cash flow/adjusted net debt	**6.6 %**	9.2 %	-260bps
Regulatory performance measures:			
Asset growth	**5.6 %**	9.0 %	-340bps
Group Return on Equity[1]	**10.6 %**	12.0 %	-140bps
Value Added	**1,808**	2,040	(11)%
Regulatory gearing	**65 %**	63 %	200bps

1. Group RoE for 2019/20 recalculated to reflect the revision to decrease the comparative goodwill balance (see note 1F for details).

We explain the basis of these alternative performance measures and regulatory performance measures and, where practicable, reconcile them to statutory results on pages 250 – 259.

The Group's statutory results for the year were impacted by exceptional charges. The impact on statutory EPS as a result of these charges is presented after each item. These included costs associated with the implementation of our new operating model (1.2p) and transaction costs associated with the acquisition of Western Power Distribution (WPD) and the sale of NECO expected to take place in 2021/22 (0.7p). Last year's statutory results were adversely impacted by additional environmental provisions, a reduction in the discount rate applied to certain provisions across the Group (8.6p) and a deferred tax charge due to the reversal of the expected reduction in the UK corporation tax rate originally enacted by the Finance Act 2016 (5.6p). The 2020/21 statutory results include an exceptional credit of (0.3p) for the £14 million release of environmental provisions relating to one of our US Superfund sites, where this was originally treated as an exceptional item.

Statutory operating profit was favourably impacted by commodity remeasurement gains of £34 million in 2020/21 (2019/20: £125 million losses) from mark-to-market movements on derivatives which are used to hedge the cost of buying wholesale gas and electricity on behalf of our US customers.

Underlying operating profit was down 5% (down 3% at constant currency) as higher rate case revenues in US Regulated and increased net revenues in UK Gas Transmission and NGV were more than offset by increased costs, including £103 million increase in US bad debt costs (with an estimated £67 million of this increase being COVID-19-related), and higher depreciation and amortisation, along with and lower levels of sales in our property business. The combination of these factors was partly offset by lower net financing costs, driven by lower inflation on RPI-linked debt and new borrowings issued at lower interest rates, partly offset by higher non-debt interest charges. A lower contribution was made by our joint ventures and associates and the tax charge was higher primarily due to reduction in tax credits relating to prior years. Underlying profit after tax decreased by 5% and, combined with a higher share count, resulted in a 7% decrease in underlying EPS to 54.2p.

Capital investment of £5.0 billion helped increase our asset growth to 6%. We delivered Value Added (our measure of economic profit) of £1.8 billion in 2020/21, lower than in 2019/20. Group RoE of 10.6% was lower than 12.0% for 2019/20, reflecting the impact of COVID-19 (excluding bad debts), higher level of non-deferrable storms in the US and lower level of property sales in the UK. RCF/net debt at 6.6% was lower than 9.2% in 2019/20. The recommended full-year dividend per share of 49.16p is in line with the policy of increasing in line with RPI inflation and is covered 1.1 times by underlying EPS. In March 2021, we announced that from 2021/22 onwards, the dividend policy will aim to deliver annual dividend per share growth in line with UK CPIH inflation.

Profitability and earnings

The table below reconciles our statutory profit measures for continuing operations, at actual exchange rates, to adjusted and underlying versions.

Reconciliation of profit and earnings from continuing operations

	Operating profit			Profit after tax			Earnings per share		
£m	2020/21	2019/20	Change	2020/21	2019/20	Change	2020/21	2019/20	Change
Statutory results	**2,895**	2,780	4 %	**1,641**	1,274	29 %	**46.6 p**	36.8 p	27 %
Exceptional items	**65**	402		**57**	491		**1.6 p**	14.2 p	
Remeasurements	**(34)**	125		**(64)**	148		**(1.8)p**	4.2 p	
Adjusted results	**2,926**	3,307	(12)%	**1,634**	1,913	(15)%	**46.4 p**	55.2 p	(16)%
Timing	**207**	147		**166**	102		**4.7 p**	3.0 p	
Major storm costs	**150**	—		**111**	—		**3.1 p**	— p	
Underlying results	**3,283**	3,454	(5)%	**1,911**	2,015	(5)%	**54.2 p**	58.2 p	(7)%

Exceptional income/(expense) from continuing operations

	Impact on operating profit		Impact on profit after tax		Impact on EPS	
£m	2020/21	2019/20	2020/21	2019/20	2020/21	2019/20
Changes in environmental provision	**14**	(402)	**11**	(299)	**0.3 p**	(8.6)p
Transaction costs	**(24)**	—	**(24)**	—	**(0.7)p**	— p
New operating model implementation costs	**(55)**	—	**(44)**	—	**(1.2)p**	— p
Deferred tax arising on the reversal of the reduction in UK corporation tax rate	**—**	—	**—**	(192)	**— p**	(5.6)p
Total	**(65)**	(402)	**(57)**	(491)	**(1.6)p**	(14.2)p

This year we have classified the following items as exceptional:

- **Changes in environmental provisions:** a £14 million credit in relation to a reduction in the environmental provision booked in 2019/20 as exceptional;
- **Transaction costs:** £24 million of transaction costs associated with the acquisition of Western Power Distribution (WPD) and the sale of NECO expected to take place during 2021/22; and
- **New operating model implementation costs:** £55 million of costs in relation to the design and implementation of our new operating model that is designed to transform our operating framework and will be built on a foundation of six business units, as described further on page 2.

In the prior year we classified the £402 million of environmental costs (comprising a £326 million increase in the provision for clean-up related to former manufacturing gas plant facilities, formerly owned or operated by the Group or its predecessor companies and £76 million for the impact of a reduction of 0.5% in the real discount rate applied to the environmental provisions across the Group); and a £192 million impact on deferred tax as a result of the reversal of the provisions of The Finance Act 2016 which reduced the UK corporation tax rate to 17% with effect from April 2020.

We also exclude certain unrealised gains and losses on mark-to-market financial instruments from adjusted profit; see notes 5 and 6 to the financial statements for further information. Net remeasurement gains of £34 million on commodity contract derivatives were incurred in addition to net remeasurement gains of £72 million on financing-related instruments and a further £8 million of remeasurement losses related to our share of post-tax results of joint ventures.

Financial review continued

Timing over/(under)-recoveries

In calculating underlying profit, we exclude regulatory revenue timing over- and under-recoveries and major storm costs (as defined below). Under the Group's regulatory frameworks, most of the revenues we are allowed to collect each year are governed by regulatory price controls in the UK and rate plans in the US. If more than this allowed level of revenue is collected, an adjustment will be made to future prices to reflect this over-recovery; likewise, if less than this level of revenue is collected, an adjustment will be made to future prices in respect of the under-recovery. We also collect revenues from customers and pass these on to third parties (e.g. NYSERDA). These variances between allowed and collected revenues and timing of revenue collections for pass-through costs give rise to over- and under-recoveries.

The following table summarises management's estimates of such amounts for the two years ended 31 March 2021. All amounts are shown on a pre-tax basis and, where appropriate, opening balances are restated for exchange adjustments and to correspond with subsequent regulatory filings and calculations. All amounts are translated at the current year average exchange rate of $1.34:£1.

£m	2020/21	2019/20
Balance at start of year (restated)	**261**	384
In-year (under)/over-recovery	**(207)**	(137)
Balance at end of year	**54**	247

In 2020/21, we experienced timing under-recoveries of £88 million in UK Electricity Transmission, £96 million in UK Gas Transmission and £23 million in US Regulated. In calculating the post-tax effect of these timing recoveries, we impute a tax rate, based on the regional marginal tax rates, consistent with the relative mix of UK and US balances.

Major storm costs

We also take account of the impact of major storm costs in the US where the aggregate amount is sufficiently material in any given year. Such costs (net of certain deductibles) are recoverable under our rate plans but are expensed as incurred under IFRS. Accordingly, where the total incurred cost (after deductibles) exceeds $100 million in any given year, we exclude the net costs from underlying earnings. In 2020/21, we experienced around double the number of storm events compared to the prior year, resulting in $201 million of deferrable storm costs, which are eligible for future recovery. In 2019/20 we experienced $98 million of deferrable storm costs. This value fell just below the $100 million threshold and as such was not excluded from our underlying results, even though these costs are also eligible for future recovery.

Segmental operating profit

The tables below set out operating profit on adjusted and underlying bases.

Adjusted operating profit

£m	2020/21	2019/20	Change
UK Electricity Transmission	**1,034**	1,320	(22)%
UK Gas Transmission	**342**	348	(2)%
US Regulated	**1,313**	1,397	(6)%
NGV and Other activities	**237**	242	(2)%
Total	**2,926**	3,307	(12)%

Underlying operating profit

£m	2020/21	2019/20	Change
UK Electricity Transmission	**1,122**	1,174	(4)%
UK Gas Transmission	**438**	402	9 %
US Regulated	**1,486**	1,636	(9)%
NGV and Other activities	**237**	242	(2)%
Total	**3,283**	3,454	(5)%

The statutory operating profit increased in the year primarily as a result of the £402 million exceptional charges made in 2019/20, partly offset by adverse movements on timing under-recoveries and higher storm costs. The reasons for the movements in underlying operating profit are described in the segmental commentaries below. Unless otherwise stated, the discussion of performance in the remainder of this financial review focuses on underlying results.

UK Electricity Transmission

£m	2020/21	2019/20	Change
Revenue	**3,992**	3,702	8 %
Operating costs	**(2,965)**	(2,386)	24 %
Statutory operating profit	**1,027**	1,316	(22)%
Exceptional items	**7**	4	75 %
Adjusted operating profit	**1,034**	1,320	(22)%
Timing	**88**	(146)	(160)%
Underlying operating profit	**1,122**	1,174	(4)%
Analysed as follows:			
Net revenue	**1,930**	2,174	(11)%
Regulated controllable costs	**(291)**	(306)	(5)%
Post-retirement benefits	**(45)**	(48)	(6)%
Other operating costs	**(53)**	(31)	71 %
Depreciation and amortisation	**(507)**	(469)	8 %
Adjusted operating profit	**1,034**	1,320	(22)%
Timing	**88**	(146)	(160)%
Underlying operating profit	**1,122**	1,174	(4)%

Although ESO is a separate legal entity from National Grid Electricity Transmission plc, we continue to report these two businesses in aggregate, within our UK Electricity Transmission segment.

UK Electricity Transmission statutory operating profit was £289 million lower in the year, mainly due to timing movements. In 2020/21, there were £7 million of exceptional costs related to establishing our new operating model, compared to £4 million of environmental charges in the prior year. Timing under-recoveries of £88 million in 2020/21 compared to over-recoveries of £146 million in 2019/20 are primarily due to lower half-hourly volumes, lower collection of prior year balances and under-recovery of balancing services costs in ESO due to the Balancing Services Use of System (BSUoS) COVID-19 support scheme.

Adjusted operating profit reduced by £286 million (22%), predominantly driven by £234 million adverse year-on-year timing movements. Underlying operating profit decreased by 4%. Net revenues (adjusted for timing) were relatively flat, with higher incentives income, legal settlements, diversion income and the RPI uplift, being offset by the lower re-opener allowances for cyber and data centres and funding for ESO legal separation in 2019/20. Regulated controllable costs were lower, with efficiency savings and the absence of prior period one-off costs partly offset by higher IT costs and COVID-19-related costs. Other costs were higher, mainly relating to customer diversion costs which are offset by higher revenue.

The increase in depreciation and amortisation charges reflects continued investment including a full year charge for Western Link and a benefit from the release of provisions in 2019/20.

UK Gas Transmission

£m	2020/21	2019/20	Change
Revenue	**904**	927	(2)%
Operating costs	**(567)**	(580)	(2)%
Statutory operating profit	**337**	347	(3)%
Exceptional items	**5**	1	400 %
Adjusted operating profit	**342**	348	(2)%
Timing	**96**	54	78 %
Underlying operating profit	**438**	402	9 %
Analysed as follows:			
Net revenue	**671**	685	(2)%
Regulated controllable costs	**(122)**	(127)	(4)%
Post-retirement benefits	**(18)**	(19)	(5)%
Other operating costs	**(24)**	(20)	20 %
Depreciation and amortisation	**(165)**	(171)	(4)%
Adjusted operating profit	**342**	348	(2)%
Timing	**96**	54	78 %
Underlying operating profit	**438**	402	9 %

UK Gas Transmission statutory operating profit decreased £10 million in the year. In 2020/21 there were £5 million of exceptional costs related to establishing our new operating model, compared to £1 million of environmental charges in the prior year. Timing under-recoveries of £96 million in 2020/21 compared to £54 million in the prior year primarily as a result of under-collections relating to the new gas capacity charging regime and lower demand, partly offset by a lower return of prior period over-recoveries.

Adjusted operating profit reduced by £6 million (2%), including £42 million year-on-year adverse timing under-recoveries. Underlying operating profit increased by 9%. Net revenue (adjusted for timing) was higher, reflecting the impact of prior year return of Fleetwood allowances and the RPI uplift, partly offset by re-opener allowances (in 2019/20) for cyber and data centres and lower incentives income. Regulated controllable costs were £5 million lower, mainly driven by efficiency savings. Other costs were higher principally due to increased asset decommissioning costs.

US Regulated

£m	2020/21	2019/20	Change
Revenue	**9,195**	9,205	— %
Operating costs	**(7,851)**	(8,325)	(6)%
Statutory operating profit	**1,344**	880	53 %
Exceptional items	**3**	392	(99)%
Remeasurements	**(34)**	125	(127)%
Adjusted operating profit	**1,313**	1,397	(6)%
Timing	**23**	239	(90)%
Major storm costs	**150**	—	n/a
Underlying operating profit	**1,486**	1,636	(9)%
Analysed as follows:			
Net revenue	**5,942**	5,745	3 %
Regulated controllable costs	**(1,905)**	(1,871)	2 %
Post-retirement benefits	**(97)**	(95)	2 %
Bad debt expense	**(325)**	(231)	41 %
Other operating costs	**(1,414)**	(1,296)	9 %
Depreciation and amortisation	**(888)**	(855)	4 %
Adjusted operating profit	**1,313**	1,397	(6)%
Timing	**23**	239	(90)%
Major storm costs	**150**	—	n/a
Underlying operating profit	**1,486**	1,636	(9)%

US Regulated statutory operating profit increased by £464 million, partly as a result of the £159 million year-on-year favourable movements in commodity contract remeasurements and adverse exchange rate movements, but mainly from the non-recurrence of exceptional charges booked in the prior year. In 2020/21, exceptional charges were lower comprising £17 million of costs related to establishing our new operating model and transaction costs, mostly offset by a £14 million environmental credit (reversal of cost previously booked as exceptional). In 2019/20, £392 million of exceptional charges were incurred for environmental costs related to the clean up of former manufacturing gas plant facilities. Timing under-recoveries of £23 million in 2020/21 compared to timing under-recoveries of £239 million in 2019/20, driven by revenue decoupling, commodity recoveries, partly offset by a higher return of NYSERDA and transmission wheeling prior period balances. Storm costs (deferrable and non-deferrable) were £142 million higher year-on-year. These factors, along with an adverse impact from COVID-19 disruption and a weaker US dollar, resulted in an overall increase in statutory operating profit, but a decrease in adjusted operating profit.

Adjusted operating profit decreased by £84 million (6%), despite £216 million year-on-year favourable timing under-recoveries. In 2020/21, we experienced higher total storm costs compared to 2019/20. In 2020/21, we incurred £150 million of deferrable storm costs, which exceeded our $100 million threshold to qualify as major and be excluded from our underlying results. In 2019/20 we incurred £76 million of deferrable storm costs, which fell below this threshold. Underlying operating profit decreased by 9%. Net revenues (adjusted for timing) increased by £223 million (at constant currency) from the benefits of rate case increments (including Niagara Mohawk and Mass Electric), capital trackers and higher revenues in wholesale networks, but were offset by a £242 million adverse impact from foreign exchange movements. A weaker US dollar decreased underlying operating profit by £66 million in the year. US Regulated controllable costs increased as a result of higher IT costs, inflation, incremental COVID-19 costs, partly offset by cost mitigations and efficiencies. Provisions for bad and doubtful debts increased by £94 million, driven by a further £179 million (2019/20: £117 million) additional provision for receivables related to the impact of COVID-19. Depreciation and amortisation increased due to the growth in assets. Other costs were higher due to increased property taxes and higher non-deferrable storm costs partly offset by lower cost of removal.

NGV and Other activities

£m	2020/21	2019/20	Change
Statutory operating profit	**187**	237	(21)%
Exceptional items	**50**	5	900 %
Adjusted operating profit	**237**	242	(2)%
Timing	**—**	—	n/a
Underlying operating profit	**237**	242	(2)%
Analysed as follows:			
NGV	**298**	269	11 %
Property	**22**	63	(65)%
Corporate and Other activities	**(83)**	(90)	(8)%
Underlying operating profit	**237**	242	(2)%

NGV's statutory operating profits were £29 million higher than 2019/20, with lower depreciation driven by the extension of asset lives at our LNG import terminal at Grain, commencement of operations at our second interconnector (IFA2) between England and France and fair value gains in our US Ventures business. These were partly offset by lower prior year one-off benefits in our legacy French interconnector (IFA1), lower revenues from our declining meter population and a £2 million exceptional charge in relation to establishing our new operating model, compared to a £1 million charge for environmental costs in 2019/20.

In 'other' activities, we incurred an exceptional charge of £25 million related to establishing our new operating model and £24 million of transaction costs for the acquisition of WPD and the sale of NECO, both expected to take place during 2021/22, compared to a £3 million charge for environmental costs in the prior year. In 2020/21, underlying operating profit included net costs of £61 million (including corporate costs), compared to £27 million in 2019/20. The underlying performance of the property business was £41 million lower than prior year reflecting a lower volume of sales compared to 2019/20.

Financing costs and taxation

Net finance costs

Net finance costs (excluding remeasurements) for the year were 10% lower than last year at £942 million, with the £107 million decrease driven by the impact of lower inflation on our RPI-linked debt, new debt issued at lower rates, a higher net debt as a result of asset growth, termination fees incurred in the prior year and favourable foreign exchange movements, partly offset by higher interest on pension and OPEB liabilities and a higher benefit from interest on tax settlements in 2019/20. The effective interest rate of 3.2% on net debt was 90bps lower than the prior year rate of 4.1%.

Joint ventures and associates

The Group's share of net profits from joint ventures and associates reduced by £22 million compared to 2019/20 mainly as a result of lower contributions from BritNed (due to an unplanned outage caused by a cable fault) and lower sales in our St William property joint venture. Our Nemo Link interconnector and National Grid Renewables both showed improved performances.

Tax

The underlying effective tax rate of 21.2% was 130bps higher than last year. The tax charge for 2019/20 benefited from a higher release of reserves following settlement of tax audits relating to earlier years. The Group's tax strategy is detailed later in this review.

Discontinued operations

Last year, we completed the sale of a 39% interest in Quadgas HoldCo Limited (Quadgas), the holding company for Cadent. As described in note 10 to the financial statements, we treated all items of income and expense relating to the disposal of Quadgas within discontinued operations.

Financial review continued

Capital investment, asset growth and Value Added

Value Added is a measure that reflects the value to shareholders of our dividend and the growth in National Grid's regulated and non-regulated assets (as measured in our regulated asset base, for regulated entities), net of the growth in overall debt. It is a key metric used to measure our performance and underpins our approach to sustainable decision-making and long-term management incentive arrangements.

A key part of our investor proposition is growth in our regulated asset base. The regulated asset base is a regulatory construct, representing the invested capital on which we are authorised to earn a cash return. By investing efficiently in our networks, we add to our regulatory asset base over the long term and this in turn contributes to delivering shareholder value. Our regulated asset base comprises our regulatory asset value in the UK, plus our rate base in the US. We also invest in related activities that are not subject to network regulation and this further contributes to asset growth.

Capital investment

Capital investment comprises capital expenditure in critical energy infrastructure, equity investments, funding contributions and loans to joint ventures and associates, the acquisition of Geronimo during 2019/20 and, in the case of National Grid Partners, investments in financial assets.

	At actual exchange rates			At constant currency		
£m	**2020/21**	2019/20	Change	**2020/21**	2019/20	Change
UK Electricity Transmission	**1,072**	1,043	3 %	**1,072**	1,043	3 %
UK Gas Transmission	**176**	249	(29)%	**176**	249	(29)%
US Regulated	**3,223**	3,228	— %	**3,223**	3,098	4 %
NGV and Other activities	**576**	885	(35)%	**576**	867	(34)%
Total	**5,047**	5,405	(7)%	**5,047**	5,257	(4)%

Investment in UK Electricity Transmission increased primarily due to Hinkley-Seabank, London Power Tunnels 2 and Smartwires spend. In UK Gas Transmission, investment reduced due to completion of the Feeder 9 gas pipeline replacement project and Peterborough and Huntingdon compressor stations. In the US, investment was up 4% on a constant currency basis, reflecting increased capital expenditure in our US New York electric businesses, mainly damage repair driven by storm activity and accelerated spend in REV (New York's 'Reforming the Energy Vision' programme) and Grid Modernisation; increased investment in wholesale networks (including line and cable relocation in NECO, higher LNG spend and also asset refurbishment in New England Power) and higher IT spend and lease additions, partly offset by reduced investment in downstate New York (gas pipe replacement and mandated gas works) which were impacted by disruptions due to COVID-19. Investment in NGV was significantly lower due to the £209 million acquisition of Geronimo in the prior year, lower investment in IFA2, which became operational this year, reduced cable and converter spend on North Sea Link (Norway), but increased investment in Viking Link (Denmark). In addition, a total amount of £38 million (including joint ventures) was invested by National Grid Partners in 2020/21, compared to £68 million in the prior year.

Asset growth and Value Added

To help readers' assessment of the financial position of the Group, the table below shows an aggregated position for the Group, as viewed from a regulatory perspective. The measures included in the table below are calculated in part from financial information used to derive measures sent to and used by our regulators in the UK and US, and accordingly inform certain of the Group's regulatory performance measures, but are not derived from, and cannot be reconciled to, IFRS.

There are certain significant assets and liabilities included in our IFRS balance sheet, which are treated differently in the analysis below, and to which we draw readers' attention. The UK RAV is higher than the IFRS value of property, plant and equipment and intangibles, principally because of the annual indexation (inflationary uplift) adjustment applied to RAV, compared to the IFRS value of these assets (held at amortised cost). In addition, under IFRS we recognise liabilities in respect of US environmental remediation costs, and pension and OPEB costs. For regulatory purposes, these are not shown as obligations because we are entitled to full recovery of costs through our existing rate plans. The impact of US tax reform in 2017/18 which resulted in a reduction in IFRS deferred tax liabilities, and from a regulatory perspective remains as a future obligation, results in a regulatory liability within US rate base (£1.6 billion at 31 March 2021). In our Value Added calculation, we have recognised an asset to reflect expected future recovery of £282 million COVID-19 related provision for bad and doubtful debts that we have included in 2019/20 and 2020/21. Regulatory IOUs which reflect net over- or under-recoveries compared to our regulatory allowances are treated within this table as obligations but do not qualify for recognition as liabilities (or assets) under IFRS. Adjusted net debt movements exclude the beneficial proceeds from the Cadent disposal in 2019/20 and movements on derivatives which are designated in cash flow hedging arrangements and for which there is no corresponding movement in total assets and other balances. Within our Value Added calculation, total assets and other balances, goodwill and adjusted net debt movement all exclude the impact of reclassifications to held for sale for NECO in 2020/21.

	2020/21			2019/20		
£m	**31 March 2021**	**31 March 2020**	**Change**	31 March 2020	31 March 2019	Change
UK RAV	**20,872**	**20,431**	**2%**	20,431	19,692	4%
US rate base	**20,041**	**18,598**	**8%**	20,644	18,407	12%
Total RAV and rate base	**40,913**	**39,029**	**5%**	41,075	38,099	8%
NGV and Other	**4,458**	**3,942**	**13%**	4,105	3,351	23%
Total assets	**45,371**	**42,971**	**6%**	45,180	41,450	9%
UK other regulated balances[1]	**(160)**	**(368)**		(357)	(302)	
US other regulated balances[2]	**1,974**	**1,613**		1,791	1,987	
Other balances	**(336)**	**(514)**		(514)	(679)	
Total assets and other balances	**46,849**	**43,702**	**3,147**	46,100	42,456	3,644
Increase in goodwill			**—**			81
Cash dividends			**1,413**			892
Adjusted net debt movement			**(2,752)**			(2,577)
Value added			**1,808**			2,040

1. Includes totex-related regulatory IOUs of £310 million (2020: £411 million), under-recovered timing balances of £150 million (2020: £24 million over-recovered) and under-recovered legacy balances related to previous price controls of £nil (2020: £78 million).
2. Includes assets for construction work-in-progress of £1,639 million (2020: £1,510 million), other regulatory assets related to timing and other cost deferrals of £806 million (2020: £642 million) and net working capital liabilities of £471 million (2020: £361 million).

Figures relating to prior periods have, where appropriate, been re-presented at constant currency, for opening balance adjustments following the completion of the UK regulatory reporting pack process in 2020 and finalisation of US balances.

During 2020/21, our combined regulated asset base and NGV and Other businesses' assets grew by £2.4 billion or 6% on a constant currency basis compared to an increase of 9% in the prior year. UK RAV growth was 2.2% including RPI indexation of 1.5% while US rate base grew strongly by 8%.

Value Added, which reflects the key components of value delivery to shareholders (i.e. dividend and growth in the economic value of the Group's assets, net of growth in net debt) was £1.8 billion in 2020/21. This was slightly lower than last year's £2.0 billion, with lower US returns and the impact of COVID-19 and higher storm costs, offset by lower interest and improved NGV performance. Of the £1.8 billion value added, £1.4 billion was paid to shareholders as cash dividends and £0.4 billion was retained in the business. The 2019/20 measure excluded any benefit arising from the sale of our 39% interest in Quadgas HoldCo Limited. Value Added per share was 51.3p compared with 58.9p in 2019/20.

Cash flow, net debt and funding

Net debt is the aggregate of cash and cash equivalents, borrowings, current financial and other investments and derivatives (excluding commodity contract derivatives) as disclosed in note 29 to the financial statements. 'Adjusted net debt' used for the RCF/adjusted net debt calculation is principally adjusted for pension deficits and hybrid debt instruments. For a full reconciliation see page 255.

The following table summarises the Group's cash flow for the year, reconciling this to the change in net debt.

Summary cash flow statement

£m	2020/21	2019/20	Change
Cash generated from continuing operations	**4,618**	4,914	(6)%
Cash capital expenditure and acquisition of investments	**(4,920)**	(5,098)	(3)%
Dividends from joint ventures and associates	**80**	75	7 %
Business net cash flow from continuing operations	**(222)**	(109)	104 %
Net interest paid	**(819)**	(884)	(7)%
Net tax paid	**(157)**	(199)	(21)%
Ordinary dividends	**(1,413)**	(892)	58 %
Other cash movements	**14**	10	40 %
Net cash flow from continuing operations	**(2,597)**	(2,074)	25 %
Quadgas sale proceeds	**—**	1,965	n/a
Discontinued operations	**—**	(91)	n/a
Net cash flows from other investing and financing transactions	**2,692**	17	n/a
Increase/(decrease) in cash and cash equivalents	**95**	(183)	(152)%
Reconciliation to movement in net debt			
Increase/(decrease) in cash and cash equivalents	**95**	(183)	(152)%
Less: net cash flows from other investing and financing transactions	**(2,692)**	(17)	n/a
Cash and borrowings reclassified to held for sale	**1,119**	—	n/a
Other non-cash movements in net debt	**1,522**	(1,387)	(210)%
Increase in net debt	**44**	(1,587)	(103)%
Net debt at start of year	**(28,590)**	(26,529)	8 %
Impact of adoption of IFRS 16	**—**	(474)	n/a
Net debt at end of year	**(28,546)**	(28,590)	(0.2)%

Cash flow generated from continuing operations was £4.6 billion, £296 million lower than last year, mainly due to adverse timing and increased storm costs, lower cash collections, lower revenues and incremental costs as a result of COVID-19, higher spend on provisions, the impact of year-on-year exchange rate movements, offset by favourable working capital inflows on payables. Cash expended on investment activities decreased as a result of lower investment in UK Gas Transmission and NGV (including last year's acquisition of Geronimo) and movements in capex prepayments and accruals. Net interest paid decreased in spite of the growth in net debt as a result of lower rates and hybrid termination fees incurred in 2019/20. The Group made net tax payments of £157 million during 2020/21. A 17% scrip take-up in the year reduced the cash dividend to £1,413 million, but this was £521 million higher than in 2019/20, when the scrip take-up was 46%. In 2019/20, proceeds of £1,965 million (plus £6 million of interest) from the Quadgas HoldCo Limited disposal, were partly offset by outflows for residual provisions and accruals classified within discontinued operations. Non-cash movements primarily reflect changes in the sterling-dollar exchange rate, accretions on index-linked debt, finance lease additions and other derivative fair value movements. Closing net debt of £28.5 billion excludes £1.1 billion of net debt in NECO which was reclassified as held for sale on 31 March 2021.

During the year we raised over £5.6 billion of new long-term senior debt to refinance maturing debt and to fund a portion of our significant capital programme.The new bonds issued include further borrowings under our Green Financing Framework. We also used this framework to agree £539 million of ECA financing for our Viking interconnector. As at 30 April 2021, we have £6.0 billion of undrawn committed facilities available for general corporate purposes, all of which have expiry dates beyond June 2023.

In March 2021, Moody's, S&P and Fitch all downgraded the senior unsecured credit ratings of National Grid plc and the majority of our rated operating subsidiaries by one notch. This action reflected the agencies' assessment that Group cash flow metrics would, for several years, no longer meet the thresholds previously expected. This reflected the combined impacts of the COVID-19 pandemic, increased levels of capital investment, delays to rate increases in our US operations and the cash flow impacts of the new RIIO-2 price control in the UK.

The Board has considered the Group's ability to finance normal operations as well as funding a significant capital programme, in light of the disruption caused by COVID-19. This includes stress-testing of the Group's finances under a 'reasonable worst case' scenario, assessing the impact of the acquisition of WPD (and any penalties if the transaction did not proceed), the timing of the NECO and National Grid Gas plc transactions, and the further levers at the Board's discretion to ensure our businesses are adequately financed. As a result, the Board has concluded that the Group will have adequate resources to do so.

Financial position

The following table sets out a condensed version of the Group's IFRS balance sheet.

Summary balance sheet

£m	31 March 2021	31 March 2020	Change
Goodwill and intangibles[1]	**6,031**	7,007	(14)%
Property, plant and equipment[1]	**47,043**	49,762	(5)%
Assets and liabilities held for sale	**1,989**	—	n/a
Other net assets/(liabilities)	**(328)**	(414)	(21)%
Tax balances[1]	**(4,817)**	(4,365)	10 %
Net pension asset/(liabilities)	**715**	(953)	(175)%
Provisions	**(2,227)**	(2,654)	(16)%
Net debt	**(28,546)**	(28,590)	(0.2)%
Net assets	**19,860**	19,793	— %

1. Comparative amounts have been revised as described in note 1F.

Financial review continued

Property, plant and equipment increased as a result of the continuing capital investment programme, offset by foreign exchange losses and reclassifications to held for sale. Assets held for sale comprises assets and liabilities of NECO, which we expect to sell during 2021/22 (see note 10 to the financial statements). Net pension liabilities reduced in the US as a result of higher asset valuations and foreign exchange movements, partly offset by lower net pension assets in the UK as a result of lower discount rates. Provisions decreased principally as a result of continued spend against environmental and other provisions recognised in previous years and foreign exchange movements. Other movements are largely explained by net working capital inflows and changes in the sterling-dollar exchange rate.

Regulatory gearing, measured as net debt as a proportion of total regulatory asset value and other business invested capital, was 65% as at 31 March 2021. This was up from 63% at the previous year-end. Taking into account the benefit of our hybrid debt, adjusted gearing as at 31 March 2021 was 63% and remains appropriate for the current overall Group credit rating of BBB+/Baa1 (S&P/Moody's).

Retained cash flow as a proportion of adjusted net debt was 6.6%. This is slightly below the long-term average level of 7% indicated by Moody's, as consistent with maintaining our current Group rating, although the metric this year has been impacted by a below average level of uptake of the scrip dividend option, alongside increased costs related to the COVID-19 pandemic, timing outflows and high levels of storm costs. The funds from operations to debt metric was 11.7%, in the middle of the target range for the current rating.

Off-balance sheet items

There were no significant off-balance sheet items other than the commitments and contingencies detailed in note 30 of the financial statements.

Economic returns

In addition to Value Added, one of the principal ways in which we measure our performance in generating value for shareholders is to divide regulated financial performance by regulatory equity, to produce Return on Equity (RoE).

As explained on page 255, regulated financial performance adjusts reported operating profit to reflect the impact of the Group's various regulatory economic arrangements in the UK and US. In order to show underlying performance, we calculate RoE measures excluding exceptional items of income or expenditure.

Group RoE is used to measure our performance in generating value for our shareholders by dividing regulated and non-regulated financial performance, after interest and tax, by our measure of equity investment in all our businesses, including the regulated businesses, NGV and Other activities and joint ventures.

Regulated RoEs are measures of how the businesses are performing compared to the assumptions and allowances set by our regulators. US and UK regulated returns are calculated using the capital structure assumed within their respective regulatory arrangements and, in the case of the UK, assuming 3% RPI inflation. As these assumptions differ between the UK and the US, RoE measures are not directly comparable between the two geographies. In our performance measures, we compare achieved RoEs to the level assumed when setting base rate and revenue allowances in each jurisdiction.

Return on Equity

£m	2020/21	2019/20	Change
UK Electricity Transmission	**13.9%**	13.5%	40bps
UK Gas Transmission	**9.6%**	9.8%	-20bps
UK weighted average	**12.6%**	12.4%	20bps
US Regulated	**7.2%**	9.3%	-210bps
Group Return on Equity[1]	**10.6%**	12.0%	-140bps

1. Group RoE in 2019/20 has been recalculated as 12.0% (previously 11.7%), reflecting the revision to decrease the comparative goodwill balance (see note 1F for details).

The overall weighted average RoE for the two UK transmission businesses was 12.6%, representing 250bps outperformance of the base allowed return. Electricity Transmission performance increased in the year with improved incentives performance and legacy recoveries, partly offset by a marginally lower totex performance than in 2019/20. Gas Transmission return decreased by 20bps due to reduced totex performance, with higher than allowed costs incurred for delivering key projects.

During the year, the financial performance of the US regulated business was impacted by additional costs of COVID-19, and a greater number of storms, with our achieved RoE decreasing by 210bps to 7.2% (excluding COVID-19 related bad debts). The achieved RoE represents 76% of the weighted average allowed return across all jurisdictions. US returns are not affected by the COVID-19-related bad debt provisions recognised in 2020/21 and include an adjustment reflecting our expectation for future recovery of these bad debt costs.

Overall Group RoE, which incorporates Property, Corporate and Other, and financing performance was 10.6%, lower than 2019/20.

Tax transparency

As a responsible taxpayer, we have voluntarily included additional tax disclosures, which we believe are of significant interest to many of our stakeholders.

Tax strategy

National Grid is a responsible taxpayer. Our approach to tax is consistent with the Group's broader commitments to doing business responsibly and upholding the highest ethical standards. This includes managing our tax affairs, as we recognise that our tax contribution supports public services and the wider economy. We endeavour to manage our tax affairs so that we pay and collect the right amount of tax, at the right time, in accordance with the tax laws in all the territories in which we operate. We will claim valid tax reliefs and incentives where these are applicable to our business operations, but only where they are widely accepted through the relevant tax legislation such as those established by government to promote investment, employment and economic growth. We do not have operations in tax havens or low tax jurisdictions without commercial purpose.

We have a strong governance framework and our internal control and risk management framework helps us manage risks, including tax risk, appropriately. We take a conservative approach to tax risk. However, there is no prescriptive level or pre-defined limit to the amount of acceptable tax risk.

Our financial statements, including the tax note have been audited. The figures in the tax transparency disclosures in the Annual Report and Accounts have been taken from our financial systems, which are subject to our internal control framework.

We act with openness and honesty when engaging with relevant tax authorities and seek to work with tax authorities on a real-time basis. We engage proactively in developments of external tax policy and engage with relevant bodies where appropriate. Ultimate responsibility and oversight of our tax strategy and governance rests with the Finance Committee, with executive management delegated to our Chief Financial Officer who oversees and approves the tax strategy on an annual basis. For more detailed information, please refer to our published global tax strategy on our website.

Country-by-country reporting summary

We have disclosed in the table below data showing the scale of our activities in each of the countries we operate in. This allows our stakeholders to see the profits earned, taxes paid and the context of those payments.

2020/21	Revenue					
Tax jurisdiction	Unrelated party £m	Related party[1] £m	Total £m	Profit/(loss) before income tax[2] £m	Income tax accrued – current year[3] £m	Tangible assets[4]/(liabilities) other than cash and cash equivalents £m
United Kingdom	5,482	106	**5,588**	1,718	213	20,796
United States	9,297	43	**9,340**	341	3	26,247
Isle of Man	—	15	**15**	23	—	—
Luxembourg	—	—	**—**	1,667	—	—
Netherlands	—	52	**52**	1	—	—
Cross-border consolidation	—	—	**—**	(1,667)	—	—
Total	14,779	216	**14,995**	2,083	216	47,043

2019/20	Revenue					
Tax jurisdiction	Unrelated party £m	Related party[1] £m	Total £m	Profit/(loss) before income tax[2] £m	Income tax accrued – current year[3] £m	Tangible assets[4]/(liabilities) other than cash and cash equivalents £m
United Kingdom	5,282	113	**5,395**	1,821	179	19,940
United States	9,258	82	**9,340**	(82)	(2)	29,822
Ireland	—	—	**—**	—	—	—
Isle of Man	—	16	**16**	3	—	—
Luxembourg	—	—	**—**	—	—	—
Netherlands	—	55	**55**	12	—	—
Total	14,540	266	**14,806**	1,754	177	49,762

1. Related party revenue only includes cross-border transactions.
2. Profit/(loss) before income tax from continuing operations after exceptionals.
3. See the tax charge to tax paid reconciliation below for further information.
4. Tangible assets are comprised of property, plant and equipment.

Our Hong Kong entity is UK tax resident, our entities in Australia and Canada are dormant and our entities in Ireland and Jersey are in liquidation. Therefore, those jurisdictions have not been included in the table above.

Our Isle of Man company is a captive insurance company which is treated as a controlled foreign company for UK tax purposes and as such UK corporation tax is paid on its profits by National Grid. In the Netherlands, we have a finance company which raised external finance for the Group and is taxed on its profits in the Netherlands at the corporate tax rate of 25%.

As part of our response to the Labour Party's proposal to nationalise nearly all of National Grid's UK assets we implemented measures, which included a Luxembourg holding company, in order to strengthen our ability to get a fair value for the assets in the event of a nationalisation. This holding company's profits consist of dividends offset by impairments both of which are not taxable, and these are being eliminated for Group purposes in the row 'cross-border consolidation'.

Transfer pricing is not a significant issue for the Group since there are limited transactions between Group companies, but any transactions between related parties are made on an arm's-length basis and aligned to OECD principles.

Group's total tax charge to tax paid

The total tax charge for the year disclosed in the financial statements in accordance with accounting standards and the equivalent total corporate income tax paid during the year will differ.

The principal differences between these two measures are as follows:

Reconciliation of Group's total tax charge to tax paid

£m	2020/21	2019/20
Total Group tax charge	**442**	480
Adjustment for Group non-cash deferred tax	**(218)**	(348)
Adjustments for Group current tax (charge)/credit in respect of prior years	**(8)**	45
Group current tax charge	**216**	177
Group tax instalment payments payable in respect of the prior year	**—**	78
Group tax instalment payments (repayable)/payable in the following year	**(7)**	5
Tax recoverable offset against current tax payments due[1]	**(55)**	47
Group tax refunds in respect of prior years paid in the current year	**(8)**	(113)
Group tax payments relating to tax disclosed elsewhere in the financial statements	**11**	5
Group tax paid	**157**	199
Profit before income tax[2]	**2,083**	1,754
	%	%
Effective cash tax rate	**7.5**	11.3
Effective tax rate (note 7)	**21.2**	27.4

1. Tax recoverable offset against current tax payments due relates to reduced current year UK instalment payments to utilise overpayments in prior years.
2. Profit/(loss) before income tax from continuing operations after exceptionals.

Effective cash tax rate

The effective cash tax rate for the Group is 7.5%. The difference between this and the accounting effective rate of 21.2% (see note 7 on page 152) is due to the following factors.

National Grid is a capital-intensive business, across both the UK and the US, and as such invests significant sums each year in its networks. In 2020/21 total capital expenditure was £4,931 million. To promote investment, tax legislation allows a deduction for qualifying capital expenditure at a faster rate than the associated depreciation in the statutory accounts. The impact of this is to defer cash tax payments into future years.

In the current period, the US federal taxable income was offset by brought-forward Net Operating Losses which primarily arose from deductions for qualifying capital expenditure incurred by National Grid in earlier years. Hence no significant federal tax payments were made in the current period.

In the current year, we made reduced cash tax payments in the UK (£158 million) to utilise tax recoverable from earlier years.

The Group continued to make significant payments into the UK defined benefit pension schemes, National Grid UK Pension Scheme and National Grid Electricity Group of the Electricity Supply Pension Scheme during the course of the year. These payments have further reduced the overall cash tax paid in the UK.

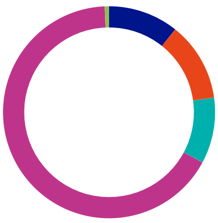
Financial review continued

Group's total tax contribution

The total amount of taxes we pay and collect globally year-on-year is significantly more than just the tax which we pay on our global profits. To provide a full picture we have disclosed the Group's global total tax contribution.

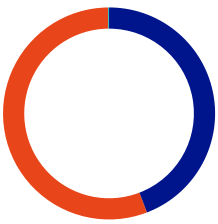
Group's total tax contribution 2020/21 (taxes paid/collected)

Taxes borne



Key:	£m
People	168
Product	189
Profit	157
Property	1,041
Miscellaneous	10
Total	**1,565**

Taxes collected



Key:	£m
People	563
Product	709
Miscellaneous	2
Total	**1,274**

2020/21	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	Total tax contribution £m	Number of employees[2] as at 31 March 2021
United Kingdom	158	225	58	672	**1,113**	6,657
United States	(1)	816	309	602	**1,726**	17,026
Ireland	–	–	–	–	**–**	–
Isle of Man	–	–	–	–	**–**	–
Luxembourg	–	–	–	–	**–**	–
Netherlands	–	–	–	–	**–**	–
Total	157	1,041	367	1,274	**2,839**	23,683

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

2019/20	Tax contribution					
Tax jurisdiction	Income tax paid/ (repaid) on cash basis[1] £m	Property taxes £m	Other taxes borne £m	Taxes collected £m	Total tax contribution £m	Number of employees[2] as at 31 March 2020
United Kingdom	306	226	57	586	**1,175**	6,321
United States	(107)	850	303	573	**1,619**	16,748
Ireland	–	–	–	–	**–**	–
Isle of Man	–	–	–	–	**–**	–
Luxembourg	–	–	–	–	**–**	–
Netherlands	–	–	–	–	**–**	–
Total	199	1,076	360	1,159	**2,794**	23,069

1. See the tax charge to tax paid reconciliation above for further information.
2. Number of employees is calculated as the total National Grid workforce across all parts of the business including Non-executive Directors and Executive Directors. All are active, permanent employees as well as both full-time and part-time employees.

For 2020/21 our total tax contribution globally was £2,839 million (2019/20: £2,794 million), taxes borne were £1,565 million (2019/20: £1,635 million) and taxes collected were £1,274 million (2019/20: £1,159 million). Our total tax contribution has increased in the year due to higher tax collected in 2020/21 in respect of both people and product taxes. The total taxes borne by the Group have fallen slightly, due to a fall in profit taxes.

Two thirds of the tax borne by the Group continues to be in relation to property taxes, of which £816 million are paid in the US across over 1,100 cities and towns in Massachusetts, New Hampshire, New York, Rhode Island and Vermont. These taxes are the municipalities' principal source of revenue to fund school districts, police and fire departments, road construction and other local services.

In the UK we participate in the 100 Group's Total Tax Contribution Survey. The survey ranks the UK's biggest listed companies in terms of their contribution to the total UK government's tax receipts. The most recent results of the survey for 2019/20 ranks National Grid as the 19th highest contributor of UK taxes (2018/19: 21st), 11th in respect of taxes borne (2018/19: 18th) and 6th in respect of capital expenditure (£1,663 million) on fixed assets (2018/19: 5th). Our ranking in the survey is proportionate to the size of our business and capitalisation relative to the other contributors to the survey.

However, National Grid's contribution to the UK and US economies is broader than just the taxes it pays over to and collects on behalf of the tax authorities.

Both in the UK and the US we employ thousands of individuals directly. We also support jobs in the construction industry through our capital expenditure, which in 2020/21 was £4,931 million, as well as supporting a significant number of jobs in our supply chain.

Furthermore, as a utility we provide a core essential service which allows the infrastructure of the country/states we operate in to run smoothly. This enables individuals and businesses to flourish and contribute to the economy and society.

Development of future tax policy

We believe that the continued development of a coherent and transparent tax policy across the Group is critical to help drive growth in the economy.

We continue to engage on consultations with policymakers where the subject matter of which impacts taxes borne or collected by our business, with the aim of openly contributing to the debate and development of tax legislation for the benefit of all our stakeholders.

To ensure that the needs of our stakeholders are considered in the development of tax policy we are a member of a number of industry groups which participate in the development of future tax policy, such as the Electricity Tax Forum and CBI Employment Taxes Working Group, together with the 100 Group in the UK, which represents the views of Finance Directors of FTSE 100 companies and several other large UK companies. We undertake similar activities in the US, where the Group is an active member in the Edison Electric Institute, the American Gas Association, the Global Business Alliance, the American Clean Power Association, the Energy Storage Association and the Solar Energy Industries Association.

Feedback from these groups, such as the results of the 100 Group Total Tax Contribution survey, and consideration of third party reporting frameworks like the GRI (Global Reporting Initiative) helps to ensure that we consider the needs of our stakeholders and are engaged at the earliest opportunity on tax issues which affect our business.

Pensions

In 2020/21, defined benefits pensions and other post-retirement benefits operating costs remained broadly flat year on year at £197 million (2019/20: £196 million). Employer contributions during the year were £274 million (2019/20: £327 million), including £88 million (2019/20: £86 million) of deficit contributions.

During the year, our pensions and other post-retirement benefit schemes moved from being in a net deficit position of £953 million at 31 March 2020 to a net surplus position of £715 million at 31 March 2021. This was principally the result of actuarial gains on plan assets of £2.6 billion (as a result of higher investment returns), partly offset by actuarial losses on plan liabilities of £1.1 billion (reflecting lower discount rates from corporate bond yields and higher expectations for long-term RPI inflation) and exchange rate movements. As at 31 March 2021, the total UK and US assets and liabilities and the overall net IAS 19 (revised) accounting surplus (2019/20: deficit) is shown below. Further information can be found in note 25 to the financial statements.

Net pension and other post-retirement obligations

	UK	US	Total
Plan assets (£m)	14,680	9,708	24,388
Plan liabilities (£m)	(13,645)	(10,028)	(23,673)
Net surplus/(deficit) (£m)	1,035	(320)	715

As at 31 March 2021, we recognised £1,109 million of UK pension assets, £371 million of US pension assets and £267 million of US other post-retirement benefit plan assets.

In December 2020, the Trustees of the NGUKPS exchanged £0.8 billion (2020: £4.4 billion) of gilts for a buy-in transaction. This follows two similar arrangements entered into in the previous year. These policies provide bulk annuities in respect of some pensioner and dependant members of NGUKPS and were funded by existing assets. All policies are held by the Trustee. For each transaction, the pricing of the policies was highly competitive; however, under IAS 19 the methodology for calculating the value of the buy-ins (as an asset held by the pension plan) differs from the price paid. This resulted in the recognition of actuarial losses on purchase of £0.1 billion (2020: £0.7 billion), recorded within the consolidated statement of other comprehensive income.

Dividend

The Board has recommended an increase in the final dividend to 32.16p per ordinary share ($2.2812 per American Depository Share) which will be paid on 18 August 2021 to shareholders on the register of members as at 4 June 2021. If approved, this will bring the full year dividend to 49.16p per ordinary share, an increase of 1.2% over the 48.57p per ordinary share in respect of the financial year ended 31 March 2020. This is in line with the increase in average UK RPI inflation for the year ended 31 March 2021 as set out in our previous dividend policy. In March 2021, we reconfirmed our dividend policy, but with an amended aim of growing the ordinary dividend per share from 2021/22 at least in line with the rate of CPIH inflation each year.

At 31 March 2021, National Grid plc had £9.9 billion of distributable reserves, which is sufficient to cover more than four years of forecast Group dividends. If approved, the final dividend will absorb approximately £1,141 million of shareholders' funds. This year's dividend is covered approximately 1.2x by underlying earnings.

The Directors consider the Group's capital structure and dividend policy at least twice a year when proposing an interim and final dividend and aim to maintain distributable reserves that provide adequate cover for dividend payments.

New accounting standards

We did not adopt any new accounting standard in 2020/21. Amendments to certain existing accounting standards were adopted during the year, but these had no material impact on the Group's results or financial statement disclosures.

Post balance sheet events

In the period between 1 April 2021 and 19 May 2021, there have been no significant post balance sheet events.

Principal operations – UK

Our UK business performed well in 2020/21 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations.

Our UK performance

Measure	2020/21	2019/20	2018/19
Return on Equity (%)	**12.6**	12.4	12.4
Statutory operating profit (£m)	**1,364**	1,663	1,045
Underlying operating profit (£m)	**1,560**	1,576	1,433
Adjusted operating profit (£m)	**1,376**	1,668	1,318
RIIO-T1 customer savings (£m)	**120**	128	101

Capital expenditure (£m)	**1,248**	1,292	1,233
Asset growth (%)	**2.2**	3.8	3.6

Customer satisfaction: ET
(out of 10)
8.4
(2019/20: 8.2)

Customer satisfaction: ESO
(out of 10)
7.5
(2019/20: 7.6)

Customer satisfaction: GT
(out of 10)
8.2
(2019/20: 8.0)

Highlights

Our UK business performed well in 2020/21 as we maintained our focus on safe, customer-led, reliable, innovative and efficient operations.

Our safety ambition is to always do the right thing regarding safety. Our strategy is to be proactive in our safety management by engaging our leaders and employees and implementing a consistent and simple risk-based approach. To support this ambition, we are focusing more on leading indicators that measure our positive efforts on safety management to help prevent incidents, while continuing to track more traditional lagging indicators. Our Safety Survey results demonstrate that we have made excellent progress towards our safety ambition.

As at 31 March 2021, our LTIFR was 0.04. This is better than our UK target of <0.10 and is our best ever LTIFR performance. Our Gas Capital Delivery business worked nearly two years, over two million person hours of complex construction activity, without having an LTI. This outstanding result was driven by a relentless focus on the work we do and commitment to keeping one another safe.

Our operations during the year have taken place against a backdrop of responding to the global COVID-19 pandemic, ensuring that the UK business, at all levels, had the necessary information and safeguards in place. We have enabled our non-operational employees who can work from home to do so and ensured our operational teams are able to work in COVID-secure environments. Working with the government, Public Health England, our health care provider and trade unions, we protected the welfare and health of our workers while maintaining safe networks.

We installed living pods at our Warwick campus and colleagues in our Transmission Network Control Centre moved into the accommodation to minimise the risk of exposure to COVID-19 and to keep the country's power going during the pandemic.

We delivered a good year of returns, with a Return on Equity of 12.6%. Statutory operating profit and underlying operating profit were lower at £1,364 million and £1,560 million respectively.

Enable the energy transition for all

We have committed to reducing our direct emissions to net zero by 2050 and to increase our influence to support the overall industry-wide transition to a low-carbon future. We have developed solutions to enable the rollout of a strategic backbone for electric vehicles throughout the UK and are working in partnership with industry to develop CCUS solutions.

Our original RIIO-2 business plans were developed following our largest ever engagement exercise to date, with customers, industry stakeholders, businesses and household bill payers across the country. Our plans included investment to maintain network reliability and provide flexibility and optionality for the UK to achieve net zero greenhouse gas emissions by 2050. Final Determinations were published by Ofgem in December 2020 and we broadly accepted the majority of the package for the Electricity and Gas Transmission businesses. We have submitted a technical appeal to the Competition and Markets Authority (CMA) regarding Ofgem's proposed cost of equity and outperformance wedge. The CMA has given permission for our appeal on both points and expects to reach a decision later in 2021.

Deliver for our customers efficiently

We work with our customers to meet their needs and deliver successful outcomes for all parties. We were pleased to see continued improvement in our CSAT scores in our ET and GT businesses, achieving scores of 8.4 (2019/20: 8.2) and 8.2 (2019/20: 8.0) respectively. For the ESO, our CSAT score in 2020/21 was 7.5 (2019/20: 7.6).

Gas started flowing through our Feeder 9 pipeline under the Humber Estuary in December 2020. The pipeline is a vital piece of infrastructure, transporting around a quarter of UK gas supplies. It also entered the Guinness Book of Records as the world's longest hydraulically inserted pipeline at 4.96km. Ofgem is minded to approve the vast majority of the funding for our Peak East Visual Impact Provision project, subject to further consultation. This is a project to remove eight pylons and approximately 2km of existing overhead lines.

In November 2019, our ET business awarded a five-year framework agreement to a US power flow control technology company, Smart Wires. We will be the first electricity transmission utility in the world to use this technology. We are working with Smart Wires to install 48 SmartValve devices at three substations on five circuits on the electricity transmission network. This agreement will help to decarbonise the UK electricity network by enabling greater volumes of renewable energy to be efficiently transferred to customers using modular power flow control technology to increase power transfer capability by making better use of its existing network. This is done with minimal impact on communities and the environment. It allows National Grid to deliver more clean and affordable energy to customers, reflecting our efforts to lead the way in supporting net zero ambitions through harnessing innovative solutions.

Grow our organisational capability

We launched ConnectNow, a new innovative online application and project management system, streamlining the process of connection to the grid. We worked closely with customers to build and launch the one stop customer portal for electricity connection customers, providing a clear, intuitive, real-time interface whilst also providing transparency throughout their connection journey.

The Western Link, the submarine HVDC link between England and Scotland operated with our Joint Venture partner Scottish Power Transmission, transmitted 6,245 GWh of green energy with a total energy availability of 92%. The link was unavailable for 653.9 hours as a result of a single onshore transmission cable fault during February 2021. In January 2021, Ofgem announced that it had launched an investigation to review the performance of the Joint Venture in delivering the cable and examine potential breaches relating to the operation of the cable. We continue to fully engage with Ofgem in relation to the investigation.

Scan here to view our story

Green collar jobs: Faris Jaweed – Greening up the gas network

I'm part of the team working on the Gas Ten Year Statement. In it we discuss and set out how we intend to operate the gas transmission network over the next decade, which should lead to changes that will play a part in ensuring a safe, secure and sustainable energy future for Great Britain. It considers ways to use our assets to meet net zero – this is a major focus of the initiative.

You won't find many other careers that offer the same level of satisfaction while being incredibly interesting and challenging, and helping to create a cleaner energy UK.

Faris' green life changes: more cycling and less eating meat and fish.

Empower colleagues for great performance

The wellbeing of our workforce is important to us. 32% of our UK employees have undertaken mental health related training courses to date, an increase of 4% since last year.

Our ONE employee resource group (ERG) was awarded the title of Top Network Group at the 2020 Ethnicity Awards. ONE has been commended for its inclusion and diversity education and training, the many initiatives and events it has organised, and for growth of membership in a difficult year. We were also placed in the top 10 in the Outstanding Employer category. The awards are a prime example of the positive impact our ERGs have. Our Enabling ERG supported the Purple Light Up events, organised by our EmployAbility interns as part of a global effort to highlight the economic contribution of employees with disabilities.

Looking ahead

The Energy White Paper will be critical to providing further policy detail needed to ensure we can get on with the delivery of net zero. We are pleased to see the progression on what is needed to deliver the important ambitions on offshore wind, interconnectors, hydrogen, CCUS heat and transport decarbonisation: delivering ambitious electricity commitments through a commitment to deliver 40 GW of offshore wind by 2030, including 1 GW of floating wind; investing £1 billion in state-of-the-art carbon capture storage by 2030; and kick-starting the hydrogen economy by working with industry to aim for 5 GW of production by 2030, backed up by a new £240m net zero Hydrogen Fund for low-carbon hydrogen production.

We were pleased to receive £9 million of funding through Ofgem's Network Innovation Competition for our FutureGrid programme, which will test the possibilities of using hydrogen on the gas transmission system. The programme aims to build a hydrogen test facility, carry out initial hydrogen testing, explore ways to separate hydrogen from natural gas and demonstrate the impact of hydrogen on compressors.

On 18 March 2021, National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals and that it will commence a process later this year for the sale of a majority stake in National Grid Gas plc, the owner of the national gas transmission system, which would be expected to complete in the second half of 2022.

nationalgridESO

As the legally separate Electricity System Operator (ESO) for Great Britain, we are in a privileged position at the heart of the energy system, balancing electricity supply and demand second by second.

In response to COVID-19, we took a number of measures to protect our control room colleagues in critical roles, introducing new layouts, enforcing social distancing, adding new hygiene measures and new shift patterns with teams permanently split across different sites. Our non-operational colleagues have adapted to working remotely and these steps have further increased the resilience of our operations, meaning that throughout the pandemic we have been able to protect our colleagues and fulfil our critical role.

Societal changes due to COVID-19, coinciding with 2020 having the sunniest spring on record in the UK, led to significant impacts on electricity in Great Britain. At times, demand fell to 20% below expected levels and zero-carbon sources have made up their largest ever share of the power mix, meaning keeping the power system stable required more interventions than ever before. High levels of generation and low demand can raise the risk of oversupply and reduce the system's resilience to sudden changes in frequency. To overcome these challenges, we developed a series of new electricity market services to help balance the system. In May 2020, we launched Optional Downward Flexibility Management – a temporary marketplace to manage reduced demand and in October 2020, Dynamic Containment went live – a new fast frequency response service. In collaboration with industry, we made progress on our Pathfinder projects, identifying how we can replace the voltage, stability and constraint management services provided by fossil fuel generation with new, greener approaches.

2020 was the greenest year on record for the electricity system, with average carbon intensity reaching a new low. Great Britain saw its longest run of generating electricity without using coal since the industrial revolution, almost 68 days (1,630 hours) between 10 April and 16 June 2020. May 2020 was the greenest month on record with average carbon intensity of 143 gCO_2/kWh and the lowest carbon intensity ever seen on the system – 46 gCO_2/kWh on 24 May 2020. The record for highest ever level of wind generation was broken on 13 February 2021 at 17.5 GW, and on 26 August 2020, wind contributed to 59.9% of the electricity mix, the highest ever. On 20 April 2020, solar power set new records for its highest ever level of generation (9.7 GW) and its highest share in the mix (34%).

We are pleased that Ofgem recognised our RIIO-2 business plan as ambitious and agreed to fund us for the activities we want to deliver, approving £504m (98%) of the costs we set out for the first two years. Ofgem has listened to our feedback and our stakeholders' feedback and made changes to the regulatory framework that will set us up to transform our role, deliver our ambitious plans and facilitate the transition to a zero-carbon electricity system. Over the five-year RIIO-2 period, the activities set out in our business plan will generate net benefits of around £2 billion for consumers, lowering average annual consumer bills by around £3.

On 21 January 2021, Ofgem published its Review of GB energy system operation. We are working closely with the government, regulator and industry to explore what changes will be needed to achieve net zero.

Following the closure of the Energy Emergency Executive Committee and Ofgem investigations into the events of 9 August 2019, the ESO has been working to deliver the recommendations outlined by both reports.

In 2017, the ESO did not meet its obligation to provide accurate and unbiased 7-day-ahead electricity demand forecasts. Following an investigation by Ofgem, the ESO made a payment of £1.5 million into Ofgem's voluntary redress fund to support vulnerable energy consumers and innovation.

Principal operations – US

In the US, in 2020/21 we performed well despite the widespread effects of COVID-19, the political divide and social unrest transpiring across the country. We renewed our focus on safety and storm response and progressed toward a clean energy future.

Our US performance

Measure	2020/21	2019/20	2018/19
Return on Equity (£m) Ⓐ	**7.2**	9.3	8.8
Statutory operating profit (£m)	**1,344**	880	1,425
Underlying operating profit (£m) Ⓐ	**1,486**	1,636	1,594
Adjusted operating profit (£m) Ⓐ	**1,313**	1,397	1,724

Capital expenditure (£m) Ⓐ	**3,223**	3,228	2,650
Asset growth (%) Ⓐ	**7.8**	12.2	9.2
Rate base* (£m) Ⓐ	**20,041**	20,644	17,565

* US rate base is as previously reported at historical exchange rates.

US Residential – Customer Trust Advice

66.2%

(2019/20: 59.8%)

Highlights

In the US, in 2020/21 we performed well despite the widespread effects of COVID-19, the political divide and social unrest transpiring across the country. We renewed our focus on safety and storm response, progressed toward a clean energy future, set goals for operating as a responsible business, and reinvested in an inclusive culture and a fully diverse workforce.

We met the challenge of enabling our employees to continue working safely during the pandemic, while providing the energy services our customers depend upon. Implementing COVID-19 safety procedures, technology advances and employee guidance helped employees navigate safely through these unprecedented times. A safe work guide and weekly severity level summaries were provided to safely continue operations throughout the pandemic. Technology improvements were made by deploying programmes like Microsoft Teams, Zscaler and document sharing, which enabled collaborative work environments from the safety of our homes. While many organisations decided not to proceed with their internship and hiring programmes due to the pandemic, we found innovative ways to make virtual hiring, onboarding and internships work.

COVID-19 compelled us to provide more support to the communities we serve. National Grid and The National Grid Foundation collectively provided nearly $3 million in COVID-19 relief throughout the communities where we live and work. We were also able to stimulate the local economy through our Manufacturing Productivity Program, which provided funding to companies across New York helping fight the virus. By awarding over $100,000 in grants to various New York manufacturers like Applied DNA Sciences and Precision Valve and Automation, these producers were able to retool their businesses in order to produce critical equipment, therapeutics and diagnostics for health care workers and patients.

We have experienced some of the most impactful storms we have seen in almost 20 years. Hurricane Isaias and the October Micro-Burst/Tornado/Derecho took their place on the US National Grid Top Ten storm list as some of the most severe weather events to affect our customers. Even after taking into account COVID-19 adjustments made early on to accommodate the Center for Disease Control (CDC) and other restrictions, our storm response performance has remained focused and steady. Our efforts around recovery and response continued to be recognised across the industry, receiving multiple awards in 2020 from the Edison Electric Institute and the North Atlantic Mutual Assistance Group.

Safety continues to be a critical pillar of our daily operations and we are fully committed to the wellbeing and safety of our workforce and customers alike. In order to conduct operations safely during the pandemic, we had to adjust early on to comply with CDC guidelines and other restrictions. We also closely monitored each state's COVID-19 plans, rules, restrictions and re-opening guidelines as they directly impact our efforts as an essential workforce. A tragic incident took the life of one of our contractor employees in November. Safety is our most important responsibility and incidents like this reminded us to continue striving to 'find a better way' to improve our safety culture. We encourage transparency and discussion around incidents that occur both in the US and UK and use these lessons as an opportunity to make the work environment safer. As of 31 March 2021, our LTIFR was 0.12. We have focused safety culture transformation programmes to engage our workers on hazard and risk awareness, and implemented controls to prevent safety incidents. We have asked our employees and contractors to direct their attention to the safety of themselves and their colleagues every day.

We have identified specific actions in the US business to support us reaching net zero by 2050. These are: reducing demand through energy efficiency and demand response; decarbonising the gas network with renewable natural gas and hydrogen; reducing methane emissions from our own gas network while working with the industry to reduce emissions through the entire value chain; integrating innovative technologies to decarbonise heat; interconnecting large-scale renewables with a 21st century grid; enabling and optimising distributed generation; utilising storage; eliminating SF6 emissions; advancing clean transportation; and investing in large-scale carbon management.

Enable the energy transition for all

Ensuring more electric vehicles are on the road is a key part of our net zero by 2050 plan, because we recognise that transport is the single biggest source of greenhouse gas emissions in our US service territory. That is why we will convert to a 100% electric fleet by 2030 for our light-duty vehicles while also pursuing the replacement of our medium- and heavy-duty vehicles with zero-carbon alternatives.

In late 2020, we completed a first-of-its-kind distributed generation interconnection cluster study to evaluate and assess the impacts of unprecedented solar saturation on the network in areas of New England. The study identified the upgrades required to ensure reliability of the system, and we proposed an innovative cost allocation proposal to potentially ease the burden on solar developers in Massachusetts. To date, the Company has interconnected over 2,000 MW of solar across its Northeast US service territory.

We have continued to advance efforts to decarbonise our gas network for a clean energy future. Our belief is that hydrogen can transform the energy industry, and it is time to start the groundwork to integrate hydrogen into the overall energy system – which is why, in New York, we are excited to be participating in a hydrogen blending study, in conjunction with NYSERDA and The Stony Brook Institute. The project will explore the performance and use of our existing gas infrastructure to integrate and store renewable hydrogen into our system. We have also recently helped secure over $12 million in funding from the US Department of Energy (DOE) to facilitate research and accelerate the potential of hydrogen blending. In addition, in 2020/21 we invested $1.77 billion in the gas infrastructure across our US service area, including the replacement of more than 350 miles (563 kilometres) of leak-prone pipe.

Deliver for our customers efficiently

Our customers are at the heart of everything we do, and the Chief Customer Officer role is crucial to our continued success as a business. In November, we appointed our new Chief Customer Officer due to her strong track record of improving and increasing customer satisfaction from the fourth to first quartile. Our new Chief Customer Officer's expertise in leading customer functions at regulated and deregulated energy companies will help make it easier for our customers to work with us.

We conducted more than 32,000 no-cost virtual home energy assessments in New England when in-person home energy assessments were suspended due to COVID-19. Through video chats, phone calls and digital pictures to assess areas for savings opportunities, energy specialists were able to provide energy-saving guidance safely and remotely. After the completed assessment, customers were sent energy-saving products like low-flow shower heads and smart plugs. They were also eligible for offers like 75% or more off approved insulation and air sealing. Our new virtual home assessments allowed us to safely provide this valuable energy efficiency programme to assist our customers with energy savings that are needed now more than ever.

In November, we filed a proposal for review with the Massachusetts Department of Public Utilities to increase gas distribution rates for our Massachusetts gas customers. The total impact of $139 million would be spread across our customer base. This rate case is still underway and if approved, these new rates would be effective from 1 October 2021. However, to avoid customer confusion and billing hold, we will be changing the rates charged to customers on 1 November 2021 to align with our gas rate changes.

Our upstate New York three-year rate agreement expired in April 2021 and in July 2020, we submitted a request for new delivery prices beginning in July 2021. We also proposed up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers as well as businesses that are struggling because of the financial impact of the pandemic. This rate case is still underway.

Grow our organisational capability

Our Customer Experience Products team recently implemented several upgrades to our customer digital channels. My Business Account is an enhanced customer-facing digital billing and payment platform for our large commercial and industrial customers. This platform was built to support our customers to self-serve through digital billing and payment programmes. It provides interactive historical cost comparisons, billing snapshots and allows for bulk payments. This platform went from a mere concept on paper to production in less than a year and is now supporting over 37,000 accounts within its pilot phase.

Our Outage Communications programme has made it easier for customers to check electric outages online or through text message. For Hurricane Isaias, we saw a fundamental shift to digital with 61% of customers reporting and checking on the status of outages online or through text. This reduced contact centre volume by 75% and resulted in higher Outage Communications Satisfaction scores for customers receiving outage information through this programme. These scores are currently above target for 2020/21, with nearly a 10-point increase over 2019/20.

Empower colleagues for great performance

During the early summer of 2020, we were reminded that racism and intolerance still exists throughout the US. This was an opportunity for companies across the country, including National Grid, to take a hard look at how we can recommit ourselves to pursuing long-lasting change. Since then, we have created an Inclusion and Diversity Action Plan with a goal of creating a more inclusive environment for our colleagues, our customers, and the communities where we live and work.

Immediate actions we've taken in the US have been providing increased access to racial dialogue sessions and training for all colleagues, as well as committing to ongoing transparency on diversity metrics. We have dedicated additional full-time resources to support our inclusion and diversity efforts, which included appointing our new Chief Diversity Officer, based in the US. In addition, we've begun to set specific and sustainable targets for diversity across the organisation for the next 5–10 years in order to achieve the inclusive culture and diversity we seek.

In November, we officially unveiled our Grid for Good initiative, which is designed to increase the social mobility and employment opportunities for young people from underserved communities across our regions. Through the Grid for Good programme, colleague volunteers work with young people aged 16 to 24 and teach them basic business skills and technical skills needed in today's competitive job market.

Our Enterprise Change Network was also launched, where colleagues take on leadership roles, creating a feedback loop of all colleague voices, and identifying opportunities for colleague engagement.

Scan here to view our story

Green collar jobs: Ryan Cote – acting to improve the environment

I'm a Senior Program Manager for electric transportation and my role is all about encouraging more people to drive electric in Rhode Island.

Right now, I oversee our Fleet Advisory Services Program that provides business customers with a roadmap on how to electrify their fleets. I also manage a residential 'Off-Peak Charging Rebate' study that incentivises participants to charge their electric vehicles (EVs) at night and I support the roll-out of our EV charging station infrastructure.

Helping our customers realise these benefits and making it easier for people to travel emission-free is at the heart of my green collar job.

Ryan's green life

When I'm not working, I try to promote EVs to friends and family. My family and I recycle whenever possible, have installed all LEDs and smart thermostats at home, and are as efficient as possible in our day-to-day activities.

This group drives awareness and understanding of any changes and supports the Company's purpose-driven journey on behalf of our customers.

Looking ahead

On 18 March, National Grid announced that it had agreed to acquire WPD from PPL subject to certain regulatory approvals. In parallel, PPL expressed its interest to expand its presence in the US, which led to an agreed sale of NECO, our Rhode Island business, which, conditional on completion of the WPD Acquisition and certain US regulatory approvals, is expected to complete in the first quarter of calendar year 2022. NECO includes our electricity transmission and distribution operations and our gas distribution operations in the state. We are confident that our Rhode Island colleagues, customers, communities and regulators will be well served by PPL. The US remains a critical growth driver of the business and we will continue to make investments in the US that will get us closer to a clean, fair, affordable energy future.

Future efforts to decarbonise our gas network for a clean energy future include being selected as co-participant with the New York Power Authority to build the Northern New York Priority Transmission Project. This project will lead to emissions reductions of 1.2 million tonnes of CO_2 and save $447 million in transmission congestion costs. The project is expected to begin construction next year and be completed by the end of 2025.

The new US operational model is essentially a move to a stronger jurisdictional structure so that we can simplify our business with clear accountabilities and goals aligned to the needs of each region. This change will help us deliver on our vision of achieving a clean, fair, affordable energy future for customers. In addition, by executing our net zero by 2050 Plan, we are doing our part to create a better world for our customers, communities, and for our children who inherit it.

National Grid Ventures and other activities

NGV and other activities performed well despite managing the impacts of COVID-19 and the Brexit transition. We maintained our focus on safety and asset reliability, while developing and delivering new clean energy projects to support the energy transition across the US and UK.

Statutory operating profit Ⓐ
£187m
(2019/20: £237m)

Underlying operating profit Ⓐ
£237m
(2019/20: £242m)

Adjusted operating profit Ⓐ
£237m
(2019/20: £242m)

Interconnector capacity by 2024
7.8 GW

LNG storage capacity by 2025
1.2m cubic metres

Highlights
This section relates to NGV, non-regulated businesses and other commercial operations not included within the business segments.

NGV, which operates separately from our core regulated units, is focused on investment in a broad range of energy businesses that operate in competitive markets across the UK and US. Its portfolio includes electricity interconnectors, LNG storage and regasification, energy metering, large-scale renewable generation and competitive transmission. Our UK metering business will form part of the GT sale process described on page 3.

Our other activities comprise NGP, the venture investment and innovation arm of National Grid plc, as well as UK property, US non-regulated businesses, LNG operations and corporate costs.

Despite challenges presented by COVID-19 in the US and UK, NGV businesses performed well again in 2020/21, including the launch of the IFA2 subsea interconnector between the UK and France, and the start of construction of the Prairie Wolf Solar project in Illinois. NGV also successfully implemented alternative trading arrangements to ensure our interconnector portfolio continued to operate following the UK's exit from the EU's Internal Energy Market as part of Brexit.

The safety and wellbeing of colleagues continues to be a key priority across NGV. As at 31 March 2021, NGV's LTIFR was 0.15. NGV LTIFR has risen from 0.05 in 2019/20, due to three minor site incidents, and the NGV business is working to bring this rate in line with the Group target of 0.10.

In aggregate, the NGV and other segment delivered £187 million of statutory operating profit, £237 million underlying operating profit and accounted for £576 million of continuing investment in 2020/21.

Enable the energy transition for all
NGV plays an important role for the National Grid Group in developing, constructing, operating and investing in infrastructure to support the energy transition in both the UK and the US.

In the UK, NGV is the leading developer and operator of electricity interconnectors, which are high-voltage subsea electricity cables that connect the UK with neighbouring markets. They allow the UK to trade excess power, such as renewable energy created by the sun, wind and water, with other European countries. The UK government in its Energy White Paper has set an ambition for 18 GW of flexible interconnector capacity by 2030 to enable the integration of renewables. NGV already has interconnectors linking the UK to France, Belgium and the Netherlands and each year they power five million homes with clean energy. By 2030, 90% of the energy imported by NGV's interconnectors will be from zero-carbon energy sources.

NGV is part of two consortia developing CO_2 transportation and storage technology. The first consortium, Zero Carbon Humber, is developing what could be the world's first zero-carbon industrial cluster. In addition, NGV is part of the Northern Endurance Partnership, which aims to transport carbon emissions from the Humber and Teesside industrial clusters for storage deep under the Southern North Sea. Combined, these projects can reduce UK industrial emissions up to 40% and protect up to 55,000 jobs across the Humber region, while making the UK a world leader in CCUS.

In the US, NGV completed the launch of its new US large-scale renewables brand, National Grid Renewables, which includes the renewables development company formerly known as Geronimo. Project highlights include the start of construction for the 200 MW Prairie Wolf Solar Project in Illinois, as well as the completion of construction of two portfolios of smaller solar projects – the 40 MW MiSolar Portfolio in Michigan and the 15 MW Nordic Solar III Portfolio in Minneapolis, which brings the Nordic solar portfolio to approximately 70 MW in total.

The National Grid Renewables team achieved a record year of origination activity in 2020/21, with over 2 GW of signed contracts, including power purchase agreements with leading utility and corporate buyers, as well as project sale agreements to enable our utility partners to provide renewable energy for their customers, positioning the business for growth in the years ahead. The business also drove strong performance for its operating wind farms in SPP (Southwest Power Pool) and solar projects in MISO (Midcontinent Independent System Operator), which is now held in a joint venture and operated by National Grid.

NGV is part owner of New York Transco, which operates electricity transmission assets that save money for electricity consumers and offer better access to clean energy, supporting the retirement of traditional power generation. The assets include the Ramapo to Rock Tavern 345 kV Line, Frasers-Coopers Corner 345 kV Line and Staten Island Unbottling. NGV is also a 50-50 joint venture partner with NextEra Energy Resources in two battery energy storage systems on Long Island. These include two 5 MW, 40 MWh battery energy storage systems in East Hampton and Montauk, New York. The batteries, which serve as an alternative to building new transmission or fossil-fired peaking capacity, enable energy peak-shaving during the busy summer months on the eastern end of Long Island.

National Grid established NGP to 'disrupt itself' and advance the energy systems of tomorrow. This includes incubating and investing in startups at the intersection of energy and emerging tech; launching new businesses from scratch; business development; and infusing an entrepreneurial culture into National Grid. NGP's portfolio as at 31 March 2021 comprises 23 companies and 4 fund investments at a fair value of £178 million.

Deliver for our customers efficiently
In 2020/21, a number of COVID-19 measures were put in place to ensure the continued availability of our assets for our customers across the UK and US, while ensuring a safe environment for our colleagues.

In the UK, NGV's interconnector portfolio comprises 5 GW of operational capacity. In January 2021, National Grid and France's Réseau de Transport d'Electricité (RTE) started commercial operations on IFA2, the second interconnector connecting France and Great Britain. The 1 GW HVDC cable stretches 149 miles (240 kilometres) across the English Channel. The England France interconnector (IFA), the first interconnector to France, is a 2 GW HVDC cable with ownership also shared between National Grid and RTE. In 2020/21, IFA's availability was 95.4%. BritNed is an independent joint venture between National Grid and TenneT, the Dutch transmission system operator. It owns and operates a 1 GW HVDC link between GB and the Netherlands. In 2020/21, BritNed's availability was 75.1%. BritNed suffered two offshore cable faults resulting in the asset being offline from December to February and again in March. Nemo Link is an independent joint venture between National Grid and Elia, the Belgian transmission system operator. It owns and operates a 1 GW HVDC link between GB and Belgium. In 2020/21, Nemo Link's availability was 99.2%.

NGV's Brexit contingency planning ensured that its customers were able to continue to buy interconnector capacity following the completion of the Brexit transition period and the UK's exit from Europe's internal energy market on 31 December 2020.

NGV's Grain LNG is one of three LNG importation facilities in the UK. It operates under long-term take or pay contracts with customers and provides importation services of ship berthing, temporary storage, ship reloading and regasification into the NTS. Utilisation of terminal capacity was 20.5% in 2020/21, down from 30.8% in 2019/20. Grain LNG's road tanker loading also offers the UK's transport and off-grid industrial sector a more environmentally friendly alternative to diesel or heavy fuel oil. The facility allows tanker operators to load and transport LNG in bulk across the UK via road or rail.

National Grid Metering (NGM) provides installation and maintenance services to energy suppliers in the UK's regulated market. It maintains an asset base of around 8.4 million domestic, industrial and commercial meters, down from 8.8 million in 2019/20.

In the US, NGV is a part-owner of Millennium Pipeline, which provides consumers in the northeastern US with additional natural gas infrastructure to meet growing consumer demand for cleaner and more reliable energy. It is strategically positioned to serve utility and power plant loads across New York State and into New England.

New York Transco continued to progress its New York Energy Solution (NYES) project, which was selected by the New York Independent System Operator to provide transmission upgrades that will relieve congestion of New York's bulk electric power system, while enhancing reliability and facilitating upstate clean energy resources to the downstate demand centres. The upgrades will take place on an existing 54.5-mile (88-kilometre) utility corridor and on utility-owned land. New York Transco has started construction on the NYES project, which remains on track for a late 2023 service date.

National Grid Property deals with the management and regeneration of National Grid's brownfield surplus estate in the UK. The specialist team works with our communities to return these redundant sites back into beneficial use to provide new homes and employment opportunities across the UK. In 2020/21, National Grid Property disposed of 41 sites and exchanged contracts on a further four land sales, to facilitate the delivery of thousands of new homes across the UK. Its joint venture with Berkeley Group, called St William Homes, has entered its seventh year and recorded a second year of profit in 2020/21 despite the challenges posed by COVID-19. Around 7,000 homes are already under construction across London and the South East.

Grow our organisational capability

NGV businesses introduced a number of measures to grow organisational capability in 2020/21. NGV's interconnector team implemented a new organisational structure to drive value across what will be a portfolio of six interconnectors by 2023/24. National Grid Metering digitised and automated key operational processes, including the deployment of new field engineering commmunications technology. It also entered long-term partnerships for the delivery of field engineering works to provide better service levels for its customers across the UK.

Empower colleagues for great performance

As the COVID-19 pandemic hit, organisations needed to quickly develop new ways of working and support the wellbeing of their colleagues. NGV developed a hub to provide its people across the US and UK with self-help material and signposts to improve confidence, wellbeing and emotional health. The new virtual wellbeing hub draws on a wealth of internal and external resources to support colleagues communicate more effectively with each other, while also providing a range of tools to take better care of themselves and their colleagues.

Looking ahead

In the UK, NGV will grow its interconnector portfolio by 2.8 GW in the next three years, with new subsea power links to Norway and Denmark. North Sea Link (NSL) will connect Great Britain and Norway. Developed between National Grid and the Norwegian transmission system operator Statnett, NSL will be 447 miles (719 kilometres). The 1.4 GW link is expected to be operational in 2021/22. Construction is also underway on the Viking Link interconnector. Developed together with Danish transmission system operator Energinet, Viking Link will be a 1.4 GW 475-mile (764-kilometre) long subsea link connecting Great Britain and Denmark. NGV will have 7.8 GW of operational interconnector capacity when Viking Link becomes operational in 2023/24.

In 2020, NGV's Grain LNG and Qatar Terminal Limited (QTL), a subsidiary of Qatar Petroleum, signed a 25-year agreement that will provide the Qatari company with storage and redelivery capacity at Grain LNG from 2025. Grain LNG will expand its storage capacity from 1 million m^3 to 1.2 million m^3 by 2025.

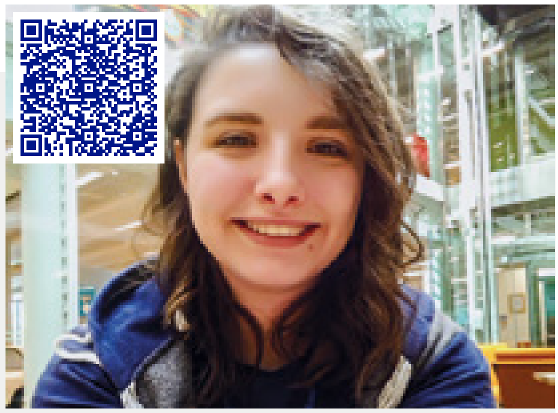
NGV will continue to progress the development of CCUS in the UK through its participation in the Zero Carbon Humber project and the Northern Endurance Partnership. NGV has also signed an agreement with TenneT to develop a vision for multi-purpose interconnectors, which aim to connect clusters of offshore wind farms to neighbouring markets simultaneously with interconnectors.

In the US, National Grid Renewables plans the start of commercial operations for several large-scale renewable energy projects across the country in 2021/22, including the Prairie Wolf Solar Project, as well as the construction of other projects.

NGV and RWE Renewables, one of the world's leading renewable energy companies, signed a joint venture partnership agreement to explore the development of offshore wind projects in the coastal region of the Northeast US. Additionally, NGV is supporting the Revolution Wind offshore wind project, which is being developed by Ørsted and Eversource. Between the two initiatives, NGV is now working with the top two offshore wind developers in the world.

St William, our joint venture with The Berkeley Group, has completed the construction of around 230 new homes across London. St William continues to grow and is expected to deliver around 20,000 new homes across London and the South East. In March 2020, National Grid Property entered into a new joint venture agreement with Places for People, one of the largest regeneration, development, and property management companies in the UK and a registered provider of affordable housing. As part of the venture, called National Places, National Grid Property has identified the first 12 sites that can deliver much-needed housing across the UK.

Scan here to view our story



Louise Guthrie – engineering for net zero

I'm a net zero Strategy Lead at National Grid Ventures. Engineering runs in my family – my dad, both grandads and twin brother are all engineers while our younger brother has just started an engineering degree.

There's never been a more exciting time to work in energy, now that we're moving away from traditional processes, looking to the future and actively seeking out new, environmentally conscious technologies.

In my last graduate placement I worked on the Viking Link interconnector project, one of the world's longest electricity interconnectors from Denmark to the UK. In my current job, I'm formulating plans to hit renewable energy targets for 2030 and 2050. One day, I'd like my legacy to be that I've been a leader in an environmentally conscious company – to be able to think 'I helped solve carbon emissions'.

Our stakeholders

The Board recognises the responsibility to all our different but interrelated stakeholder groups and wider society. We endeavour to ascertain the interests of our stakeholders and reflect them in the decisions that we make. We recognise that in balancing those different perspectives, it isn't always possible to achieve each stakeholder's preferred outcome and that consideration of each stakeholder group varies depending on the subject in question.

You can find out more about our key stakeholders and their interests, how we engaged with them and how this influenced decision-making in our section 172(1) statement that follows. For more details on how our Board operates, including the matters it discussed and debated during the year, see pages 76 – 77.

Engagement with our stakeholders

All of our Directors are briefed on their duties as set out in the Companies Act 2006 during the onboarding process, including their responsibility to promote the success of the Company in accordance with section 172.

In doing so, our Directors must have regard to our stakeholders and the other matters set out in section 172. Pages 46 – 51 comprise our section 172(1) statement, which describes how the Directors have had regard to these matters when performing their duty. In line with the Companies Act 2006, below we provide a high-level summary of the matters of importance to our stakeholders and how our Directors engaged with them and had regard to their interests when setting the Company's strategy and taking decisions concerning the business.

We recognise that effective engagement with a broad range of our stakeholders is essential to the long-term success of the business and we aim to create value for our stakeholders every day by maintaining levels of business conduct that are aligned to our values and our purpose.

Further information on our values can be found on page 18.

Our approach

Our approach to stakeholder engagement has continued in the same format we reported last year as we believe this remains effective; however, it is also shaped by the types of decisions and discussions that need to be made during the year.

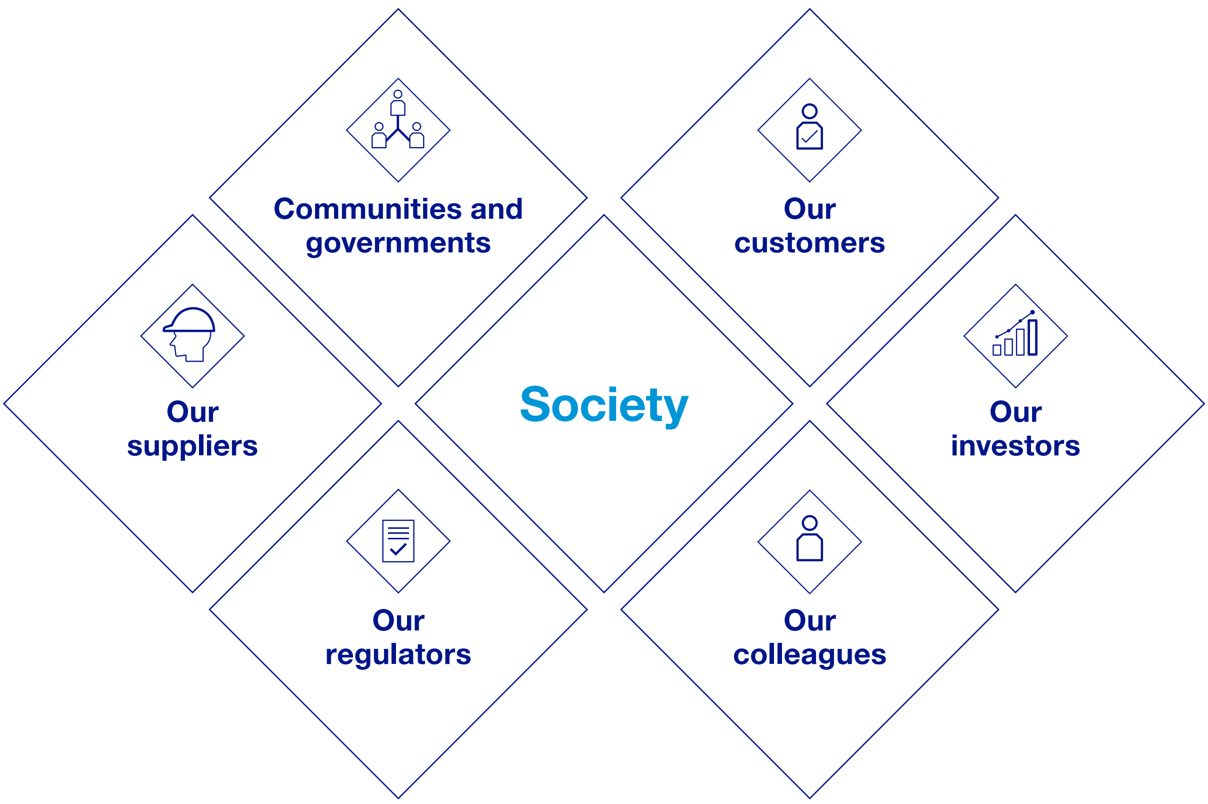
Reporting and monitoring: our engagement has continued to build on existing reporting mechanisms, whereby information on stakeholder interests is collated at a business level, so that informed decisions can be made in the most appropriate forum. An overview of these developments and business-level decisions is reported on a regular basis to the Board or a Board Committee. The cadence of these reports to the Board is considered bi-annually as part of the forward business review by the Chairman, Chief Executive and Group General Counsel & Company Secretary to ensure that sufficient consideration is given to the most pertinent issues and impacted stakeholders.

Direct engagement: our approach to direct engagement has adapted this year due to the COVID-19 pandemic. Although most of our engagement with key stakeholders is carried out by the management teams, the Board engages directly with shareholders, colleagues and investors, and engagement this year has taken place virtually. This has enabled the Non-executive Directors in particular to gain direct exposure to additional business areas and a broader cross section of colleagues. Further information can be found on page 79.

Section 172 statement

Although we recognise there are many ways for the Directors to promote the success of the Company, our section 172(1) statement focuses on stakeholder engagement undertaken this year. On these pages, we have grouped our stakeholders into six categories that the Board considers key. We note that the categories and examples included are not exhaustive in summarising all of our stakeholder considerations. We have integrated our reporting on how these key stakeholders have been considered throughout this report, and our statement should be read in conjunction with the following sections:

- information on our key stakeholders and why they are important to us, see pages 4 – 7;
- matters considered by the Board, see pages 76 – 77; and
- our response to COVID-19, see pages 8 – 9.



COVID-19

The COVID-19 pandemic has impacted on all of our stakeholders. Further information on stakeholder impact and how we have responded as a Company can be found on pages 8 – 9.

Stakeholder group	Stakeholder engagement	Looking ahead
Investors	Having stress-tested the finances of the Company against a number of potential COVID-19 scenarios throughout the year, the Board recommended a final dividend for 2019/20 and interim dividend for 2020/21 in line with its policy. The Finance Committee has held ad hoc meetings to consider the short- and longer-term liquidity of the Company in a range of different COVID-19-related scenarios. Following some delays during the early stages of the pandemic, the Company delivered on its substantial investment programme by investing £5.047 billion across our networks. The Board recognises the importance of the AGM as an opportunity to engage with shareholders. However, due to the government restrictions in place as at the date of the meetings, both the 2020 AGM and the General Meeting in April 2021 took place virtually. Shareholders were invited to watch a live webcast, which included a business presentation from the Chairman and CEO and were able to submit questions via an online portal in advance of the meeting. A full transcript of the Q&As for both the 2020 AGM and April 2021 General Meeting are available to view on our website.	We have renegotiated and/or extended our debt facilities to maintain strong liquidity over the next few years. The Company has now confirmed a policy of growing the dividend per share annually in line with CPIH. We are encouraging shareholders not to attend the 2021 AGM due to the unpredictable circumstances of the COVID-19 restrictions easing. Instead we encourage shareholders to participate via Proxy and to pre-register questions via our website. This year we are seeking shareholder approval to permit hybrid meetings.
Colleagues	From the outset our focus has been on keeping colleagues safe, equipping them well and providing regular communication, whether from senior leadership or through other channels, on the actions being taken. The early stages of the pandemic saw the rapid roll-out of Zscaler and Microsoft Teams to support colleagues working remotely, and we ensured key workers going out on site during lockdown to keep gas and electricity flowing benefitted from enhanced safety protocols. The Company has enhanced mental health programmes and increased employee engagement, for example with virtual wellbeing sessions to minimise any strain caused by virtual working. No pay reductions, furlough or redundancies were implemented for a number of months. Absenteeism as a result of COVID-19 has remained within the norms for UK and US geographies. Employee pulse surveys were carried out to gauge sentiment of employees during the pandemic. The pulse survey showed that 90% of respondents felt supported by team members with 81% confirming that they had the necessary resources in place to do their job properly. 86% felt that the Company shows care and concern for its employees, which represented a 29% increase since the full annual engagement survey carried out pre-pandemic. Colleagues highlighted that further information would be helpful on managing workload while balancing caring responsibilities. The Company has since adopted a flexible working hours policy. While many organisations decided not to carry on internship and hiring programmes due to the pandemic, we found innovative ways to make virtual hiring, onboarding and internships work.	We are monitoring progress of how the Company can accommodate employees returning safely to offices, and how we can build on some of the positive changes in our culture and ways of working as the restrictions are lifted again. Our communications confirm our support for colleagues to take up vaccination, but we recognise there could be circumstances, for example medical or religious reasons, where this is not possible or practicable. Further information on colleague engagement can be found on page 79.
Communities	Our employees have been supporting our communities by volunteering and providing their time and expertise to support charities and the most vulnerable. As part of this we have set up Grid for Good to help play our part in addressing the effects of the economic downturn in the UK and US which has seen youth unemployment double in the wake of the pandemic. In total, National Grid has made donations of £400,000 to National Emergency Fund and £183,000 to Trussell Trust UK. In addition, NGV has made a £100,000 donation to University Hospitals Birmingham for 400 tablet devices. We have provided more than $760,000 of funding in economic development grants to seven Western New York initiatives to grow the regional economy after the COVID-19 pandemic. Financial donations have been made in response to concerns received, which have helped to support hunger relief and human services for people in need and struggling due to the impacts of the pandemic. National Grid US continued to give back to the community, donating a further $100,000 to Feeding America's Hunger Action Month. This was a partnership with Feeding America, who support over 45 food banks across Massachusetts, New York and Rhode Island and is an example of the Company's ongoing efforts to support local communities. More than $2 million in charitable donations has been given in the US since the pandemic began.	National Grid was one of 200 signatories to an open letter from UK business leaders to government calling for the alignment of economic recovery plans with the UK's wider environmental and climate goals, including a quote from John Pettigrew calling for 100,000 jobs to be created in energy sector as we work to net zero. NGP became an official investor partner in 2020 Clean Fight New York with the aim of supporting clean energy startups with goals of building back better after COVID-19 and providing clean energy jobs for the region.
Customers, regulators & suppliers	Throughout the pandemic, the Company has considered ways to help customers manage their bills. In the US we suspended our debt collection and customer terminations resulting in lower customer collections and additional provisioning for doubtful debts. As part of our upstate New York rate plan filing for new delivery prices beginning in July 2021, we proposed up to $50 million in COVID-19 relief to support our most economically vulnerable residential customers as well as businesses that are struggling because of the financial impact of the pandemic. Our response to the COVID-19 pandemic has led to measurable improvements in customer satisfaction. The Cogent Syndicated 2020 Report, a nationally syndicated survey of 140 US utilities' customers scored us 7.22 on a 10-point scale on our response to the pandemic, specifically ranking us fifth out of 25 large electric/combination eastern US utilities. In the UK, we actively supported Ofgem's measures to protect customers by relaxing network charge payment terms for suppliers and shippers facing cash flow challenges as a result of COVID-19. The procurement team have kept in regular contact with our critical suppliers to ensure early identification of potential supply chain issues and to ensure the necessary support is available where required.	We continued the development and tender of future work for our suppliers, giving longer-term visibility and greater certainty of income. We further decided to postpone the filing of the US Niagara Mohawk rate case which could have resulted in bill increases in 2021. In the UK we continue to focus on managing the impacts of COVID-19 on our suppliers and supply chain, looking to ensure the successful delivery of supply contracts to support the RIIO-2 period.

Our stakeholders continued

How we create value for our stakeholders

We have provided some examples of how particular outcomes were considered by the Board below, noting that these examples are not exhaustive in summarising all our stakeholder considerations. Within each example, when outlining how the Board considered the impact on a particular stakeholder group, we also list the broader range of stakeholders the Board considered as part of its discussions.

Stakeholder group	Stakeholder engagement	Outcomes and actions
Investors (individual and institutions)	**How we engage across the Company** In October 2020, we held an ESG virtual seminar event which provided an opportunity for investors to hear from management across our UK, US and NGV businesses on ESG achievements to date and our ambitions for the future. The session covered the five pillars of responsible business activity and showcased activity, commitments and ambitions across the business. The seminar provided an opportunity for two-way interaction via Q&A sessions. The Chairman, two Non-executive Directors and Executive Directors participated in the session, and the recording can be viewed via the investors section of our website. Engagement has also taken place this year as part of the Company's results announcements and business presentations. In January 2021, we commenced our annual investor programme with the launch of Grid Guide to the future of gas event. The event was attended by over 500 people with 50% of the share register represented and included large investors, analysts, ESG experts, regulators, government departments, industry bodies and rating agencies. The session provided an update to the market on the progress we have made with different fuel technologies in both the UK and US and how these would help us achieve our net zero ambition, and provided an opportunity for investors to ask questions of those experts involved. The Company continued with its asset reunification programme to try and engage with our retail shareholders throughout the year. **How we engage at Board level** Regular investor updates are provided to the Board as part of the reporting cycle, which includes feedback on investor perceptions, business strategy and market environment. In December 2020, the Board received the results of an independent audit of investor perceptions from 20 different institutions, which together represented almost 20% of the Company's share capital. Interviews were carried out with investors to establish their views on performance of the business and management. Updates from Company-level engagement with shareholders are provided to the Board as appropriate. The Remuneration Committee Chair is engaged with shareholders throughout the year on key remuneration topics.	The seminar reconfirmed how engaged our investors are in the Company's performance while operating in a responsible way and creating a positive social impact. Questions focused on key areas of our strategy, including the energy transition and decarbonisation of heat. It was clear that looking ahead, our strategy needs to include pathways that are both practical and affordable. This series of events focuses in on specific topics, across all ESG themes, aiming to give a deeper understanding of the projects the Company is working on, and how we can make a real difference to the energy transition. Since the first future of gas event, there has been a follow up 'future of gas…extra event', as well as our 'Grid Guide to' podcast. The next topic in the series will be focusing on our role in the decarbonisation of transport and is planned for later in the year. As reported last year, we commenced an asset reunification programme in January 2020 which provided us with an opportunity to re-unite as many shareholders as possible with their unclaimed dividends. As at the date of this report, approximately £40 million was reunited with the relevant shareholders and we have re-engaged approximately 35,000 dormant shareholders. Our Articles permit any unclaimed dividend greater than 12 years to be forfeited and as a Company, we will be looking to put any unclaimed funds towards charitable causes, including Grid for Good. The investor perception study highlighted that senior management was held in high regard. The results noted that investors were generally comfortable with the Company's approach on ESG issues, but that there was a need for even greater integration of ESG in the Company's communications. The Board noted that the ESG narrative would be embedded further using the momentum from the ESG event. Examples of how this would be actioned include: • via 'Our Grid Guide to' series already launched; • via the Responsible Business Report; • building on our interactions with third-party ESG rating agencies to deliver the information they need to rate the Company accurately; and • continued investor engagement. **Views of other stakeholder groups considered**

Case study:

Agreed acquisition of WPD from PPL (subject to certain regulatory approvals) and strategic portfolio repositioning

Stakeholders considered in accordance with s.172

A significant proportion of the Board's time at the latter end of the financial year was spent discussing the Company's strategic repositioning, including the likely consequences of the decision in the long term and ensuring the balance of the needs and expectations of all our stakeholders in its decision to strategically pivot the UK portfolio towards electricity, together with the proposed sale of NECO and majority stake in NGG. This decision is strongly aligned with the Company's net zero ambition and its strategy. See pages 56 – 57 for more details.

Timeline

- **End of 2020 into 2021** – Board, Finance and Audit Committee meetings took place to discuss the strategy. The Board approved the establishment of a sub-committee. See pages 76, 85 and 88 for more detail.
- **March 2021** – Final decision taken by the Board on the strategy and announcement made.
- **22 April 2021** – General Meeting took place and shareholders approved the WPD Acquisition.
- **April 2021 onwards** – Constructive engagement with Ofgem and policymakers to agree on how best to achieve these common goals in the best interests of all our customers and wider stakeholders.

Colleagues – engagement on day of announcement

- three UK town halls took place with circa 1,700 colleagues in attendance, with a similar approach taken in the US. Various other team meetings took place across the Company.
- communications will continue with colleagues to ensure they are kept well informed of the changes.
- in the UK and US, trade unions were notified and management will continue to engage these leaders.

Customers, regulators and suppliers – engagement on day of announcement

- in the UK, approximately 240 stakeholders were engaged, including the government, Ofgem, key MPs, customers and suppliers.
- in the US, management met with the Rhode Island Governor and RIPUC Chair. Extensive regulatory and government stakeholder outreach was completed across Massachusetts and Rhode Island.
- the US customer response team monitored calls.

Investors

- 420 external participants from 23 countries joined the investor call on the morning of the announcement.
- significant engagement continues with investors.
- shareholders had the opportunity to engage with the Board in a shareholder webcast, where Q&As could be submitted and answered by the Board prior to the General Meeting.

Stakeholder group	Stakeholder engagement	Outcomes and actions
Our colleagues Further information on our colleagues can be found on page 59. Information related to our colleagues and COVID-19 can be found on page 47.	**How we engage across the Company** Engagement with our colleagues takes many forms and enables us to create an inclusive company culture and positive working environment. Examples of engagement with our colleagues this year included virtual town halls, leadership calls, operational team meetings, Q&A calls, committee meetings and team hubs. The annual employee Grid:voice survey also provides an invaluable opportunity to gain insights on what is important to employees. Once the results have been collated, action plans are put in place to address any issues raised by our colleagues. We have recently incorporated an inclusion index into the survey. We know there is always more we can do to improve inclusion and diversity, but we are pleased with the great progress made so far. See page 59 for examples of engagement on diversity. The Company also engaged closely with our colleagues following the death of George Floyd in the US to ensure that messages of support were shared and commitment to diversity across the organisation was reaffirmed. This year we also held a live interactive event with the Group Executive Committee. The session provided an opportunity for employees in both the UK and US to ask questions on matters most important to them. Themes included: the new organisational design; the safe return to offices and ways of working going forward; decision making within the business; diversity at senior leadership level; the remit of the Chief Diversity Officer and how meaningful change will be driven; the impact of RIIO-2 in the UK and the role of natural gas in the energy transition. **How we engage at Board level** The annual Grid:voice survey provides senior leadership, the Group Executive Committee and the Board with an insight into how our employees are feeling about the Company and its strategy. Action plans are developed to progress any areas of improvement that are identified. The Non-executive Directors have participated in a wide range of virtual employee engagement opportunities throughout the year, including a US employee resource group session. They also met virtually with employee representatives from trade unions based in the UK and the New England and New York regions of the US.	Employee engagement forms one of our non-financial KPIs – you can read more about this on page 22. 81% of our colleagues completed the 2021 Grid:voice survey and the overall results showed a positive trend. The Enablement Index scored 74% which was a significant 6% improvement on last year. We were pleased to have received positive feedback around people, wellbeing and development, and the response to the COVID-19 pandemic, as colleague wellness has been a priority of the past 12 months. The support for continued flexible working arrangements post pandemic will be considered as our offices start to reopen. Improvement themes included communication, decision-making and resources, all of which are linked to the culture programme and will be a continued area of focus this year. Areas of improvement identified in the 2020 Grid:voice survey included enablement and the challenges around change and decision-making. An important first step towards overcoming these limitations was the introduction of our new value 'make it happen', which together with our values 'do the right thing' and 'find a better way' is shaping the behaviours that will underpin our long-term success in the future. We were pleased to report in January 2021 that we appointed a Chief Diversity Officer, who will lead our newly created Diversity, Equality and Inclusion (DEI) team. A key focus will be to improve the DEI strategy in both the short term and long term. Workforce diversity is another one of our non-financial KPIs – you can read more about this on page 22. Feedback and resulting actions from these sessions were collated and shared with the Executive Directors. Further information on the Board employee engagement programme can be found in the Corporate Governance Report on page 79. **Views of other stakeholder groups considered**
Our regulators	**How we engage across the Company** In the UK, regular interactions with regulators including Ofgem and the Health and Safety Executive (HSE) take place, as delivering for consumers and in particular protecting vulnerable customers is a key area of focus across all sectoral regulators. The Company also organises stakeholder forums and consultations around specific projects. We also work with other networks and organisations outside of the energy industry to identify good practice. Extensive engagement has also taken place this year with BEIS and Ofgem on the proposal for a greater separation of the ESO, as well as the ESO RIIO-2 price control. Details of engagement during the RIIO-2 settlement can be found on page 51. In the US, engagement takes place with both federal and state regulators, and customers on a regular basis as part of the ongoing rate case filing process. Examples include stakeholder engagement in the pre-filing programme, the build up to, and during the rate case process. **How we engage at Board level** The Board receives regular updates on issues impacting our regulators at its meetings and this year, a large amount of time has been spent discussing RIIO-2 and our relationship with Ofgem and on US regulation, including with each State that we operate in and on rate filings. In September 2020 the Board received an update on the execution of the gas supply settlement as a response to the ongoing feedback from the independent monitor on how the Company was addressing the downstate New York (DNY) gas demand and supply imbalance.	In the UK, discussions with our regulators have contributed to a number of business decisions including the decision to appeal two specific aspects of the RIIO-2 Final Determinations. The Board discussed the future direction of the ESO in detail at its meeting in November 2020. In December 2020, the Board considered the outcome of the ESO RIIO-2 Final Determinations and agreed the recommendation not to appeal any part of the package to the CMA. This year engagement has continued in relation to settlement discussions for the KEDNY and KEDLI rate case filings submitted in January 2019. A settlement was reached in April 2021 with the NYPSC staff and certain intervenors for a three-year rate agreement, which started on April 2020, with an option to extend for a fourth year. We have continued to make progress across all elements of the DNY settlement, particularly in relation to winter readiness. The Company has taken the opportunity to show how we are delivering new and innovative ways to serve our customers in DNY and give confidence to demand response and energy efficiency, and non-pipe alternatives. Recommendations from our internal review of Gas Supply Planning following the Board's lessons learnt review are being implemented on process, governance and modelling improvements. Looking forward, these improvements will bring new capabilities to all jurisdictions in the next few years. **Views of other stakeholder groups considered**

Our stakeholders continued

How we create value for our stakeholders continued

Stakeholder group	Stakeholder engagement	Outcomes and actions
Communities and governments	**How we engage across the Company** Our Policy and Public Affairs team has continued to maintain and build relationships across governments and with wider political stakeholders. Engagement has taken place via discussions and satisfaction surveys. Management has also engaged with the government throughout the year on a range of topics, including COVID-19, RIIO-2, net zero and green recovery. Engagement with local communities has taken place via consultations, primarily during the construction phases of our projects. Engagement has also taken place with local authorities, who are involved in endorsing our STEM fund among schools and promoting adult skills courses. The local authorities direct us to the area of greatest need and promote the sessions through their job seeker networks. We also regularly liaise with land owners and wider communities where the Company has assets, and we have established dedicated teams to manage these relationships. For example we had to replace an underground electricity cable at Bredbury, which after 60 years had come to the end of its working life. We worked closely with the council to determine the best access route, balancing factors such as traffic management, community impact and future plans for the area, as well as engineering considerations. A comprehensive stakeholder mapping exercise was carried out for the Trawsfynydd Transformer Delivery Project to identify key businesses and groups, local MPs, local district and ward councillors, parish councils, and a distribution area of local properties which may have been impacted by the delivery of the transformer. As a company, we have a critical role to play in enabling the energy transition to a low-carbon future. Following our commitments to reach net zero for our own emissions by 2050, we continue to invest in projects which are aligned to our strategic ambitions and the expectations of the communities in which we operate. Further information on our net zero commitments can be found on page 63. **How we engage at Board level** The Board has received regular updates on a number of key topics this year, including the aftermath of Brexit and the Responsible Business Charter (the RBC). The RBC was created with the goal of applying a Total Societal Impact (TSI) lens to everything the Company does as a business.	We received positive feedback on our response to COVID-19 which was reported as best in class. Our Hinkley Connection Project Education Fund was named Community Investor at the 2020 Utility Week Virtual Awards. The Fund supports communities impacted by the construction of the Hinkley Connection. So far, the project has: • supported 213,663 young people, including 41,469 disadvantaged pupils through its STEM education fund with 862 grants to local schools. 49% of the pupils who have benefitted from the STEM education fund are female; • contributed over £520,000 for community, charity and environmental projects; • delivered £405,000 worth of training for almost 200 local individuals struggling to find sustainable employment – 49% of trainees have secured employment; and • reinvested over £3 million in the community by hiring local contractors to work on the project. Stakeholders were kept informed via letter drops, dedicated information lines, on-site and media support on the day of delivery, contact card dissemination and a real-time text notification service. The engagement activities undertaken supported the delivery to site, and led to positive feedback and coverage of the delivery. This year we announced our 50:50 joint venture with Places for People, a large UK registered social landlord and property developer taking a commercial approach to delivering social outcomes, including affordable housing. In the US the 200 MW Prairie Wolf solar project was approved by the Investment Committee and Joint Venture Board. Prairie Wolf is a clean solar energy project which is expected to reduce an estimated 285,000 metric tonnes of carbon dioxide emissions per annum. **Views of other stakeholder groups considered**
Our suppliers	**How we engage across the Company** The Company regularly interacts with suppliers via the procurement team. The Company also engages with our top 250 suppliers annually to complete the CDP supply chain climate change disclosure. Members of our US leadership team meet with our key gas and electricity construction suppliers on a regular cadence to discuss strategic developments in the industry, opportunities for innovation as well as overall performance. In the UK, members of the UK Group Executive Committee meet with our key construction suppliers on a regular cadence, including the CEO forum to discuss similar items. **How we engage at Board level** Annual reports relating to our suppliers were submitted to the Group Executive Committee and to the Board. The Board also receives an annual update on the approach taken to address the risk of modern slavery on our supply chains and the proposed commitments for the following year.	We strive to work with businesses who comply with our code of conduct and we continue to work closely with our suppliers and peers to build on our knowledge and promote best practice in the industry. For RIIO-2, new framework contracts are being established and to support this, supplier onboarding sessions are taking place throughout our Vendor Management approach. We held three additional sub-committees of the Board to discuss the Costain and the Peterborough compressor station contract in more detail. In November 2020, the Board received an update on the London Power Tunnels (Phase 2). The two remaining contracts for Cable Installation and Substations were issued for tender in October 2020. It was announced that a contract was agreed with Murphy Group and HOCHTIEF to deliver Phase 2, a six-year project that will see construction of a 20 mile (32.5 kilometre) tunnel that will house transmission cables 30 metres underground. The Board approves the Modern Slavery Statement on an annual basis and shows support for the evolving commitments. **Views of other stakeholder groups considered**

Stakeholder group	Stakeholder engagement	Outcomes and actions
Our customers	**How we engage across the Company** **US Customers** – The 'voice of our customer' feedback is collected throughout the US business via customer surveys. These are conducted on a tracking and an ad hoc basis to measure sentiment across residential, commercial and wholesale customers. Clean energy has remained a key focus for the voice of our customer. We track customer response to our 'Are we doing the right thing?' belief statement bi-monthly, and insights from this research support our outreach activities. **UK Customers** – Engagement with our UK customers takes place via a range of forums including liaison meetings, market research, stakeholder events and interactive customer listening sessions. Customer experience continues to be a top priority and we monitor progress in accordance with our strategy. **NGV Customers** – This year customer engagement has taken place via market research and a range of questionnaires assessing overall satisfaction. The survey asked customers to rate key metrics and provide feedback on how further support could be provided. Maintaining effective communications with our customers has been key, and this has been strongly endorsed by our customers. A virtual event took place in October 2020 which was attended by over 190 customers from 19 different countries. The event included presentations from the IFA team and their partners, a Q&A session with panel guests across Europe, a virtual exhibition hall showcasing the interconnectors and partners, and a networking lounge where attendees could discuss particular topics in focus groups. **How we engage at Board level** This year the Board received bi-annual updates on the UK, US and NGV customer performance, which included progress on deliverables aligned to our strategic priorities. The Group Executive Committee and the Board also received regular updates on the US rate case filings.	Overall customer satisfaction scores for both our electric and natural gas utilities have continued their upward trend of improvement. We recognise that improving our customer experience and reducing our long-term operating costs will require deployment of new, robust data and customer information systems. We appointed a new Chief Customer Officer in the US in December 2020 and are committed to achieving this goal. As of 11 November 2020, 79% of our commercial customers and 72% of our residential customers said they agreed that National Grid was doing the right thing during the pandemic. In New England we conducted more than 32,000 virtual home energy assessments when in-person home energy assessments were suspended. We have received an Honourable Mention (only granted to finalists) in Edison Electric Institute's 2020 Customer Advocacy Awards. Key learnings from the RIIO-T1 period have included the importance of aligning strategy with customer ambition, looking across end-to-end customer/employee journeys to break down silos and the need to ensure data and technology roadmaps are aligned and coordinated across journeys. Beyond RIIO-T1, we need to reclarify our customer ambition and agree the pace of improvement in line with the RIIO-2 arrangement. As a result of feedback received, a new customer engagement strategy was developed which included new methods of engaging virtually. This has increased the number of customer meetings per week. **Views of other stakeholder groups considered**

Case study: RIIO-2 Final Determinations

Stakeholders considered in accordance with s.172

Timeline

- **Jan – May 2020** – focus on enhancing the understanding and interrogation of our business plan submission through:
  - extensive engagement with Ofgem via meetings and formal supplementary questions; and
  - broad programme of engagement with our stakeholders, including meetings, workshops and newsletters.
- **July – Sept 2020** – focus on responding to Ofgem's Draft Determinations through:
  - analysing the content and producing an evidence-based response across all topics; and
  - engaging with stakeholders to articulate the consequences of the Draft Determinations on our stakeholders' priorities.
- **Sept – Nov 2020** – focus on exploring our Draft Determinations response with Ofgem ahead of Final Determinations through:
  - open meetings to discuss or responses to the Draft Determinations;
  - extensive engagement with Ofgem via meetings and supplementary questions; and
  - engagement with Whitehall and Parliament to ensure that the right framework was in place to support the economic recovery and net zero.
- **Dec 2020** – Final Determinations published.
- **Jan 2021** – recommendations made as to whether to accept or appeal aspects of the price control. The impact of this was considered for each stakeholder group including Ofgem, government, investors and the media.
- **March 2021** – final decision taken by the Board to broadly accept the majority of the package and submit a technical appeal to the CMA regarding cost of equity and outperformance wedge.
- **April 2021** – RII0-2 starts.

Examples of the engagement work

Gas regional workshops to inform our stakeholders of the content of our business plan (Jan – Feb 2020):

- given the extensive stakeholder input to building our plans, this was the opportunity to share the final content of our business plan and how it delivered their priorities with customers, suppliers, local community representatives, consumer representatives, trade bodies, regulators; and
- attended by 85 stakeholders in Edinburgh, London, Cardiff, Hull, St. Fergus and Bacton.

Ofgem engagement and supplementary questions to explore the content of our business plan ahead of the publication of Draft Determinations (Jan – June 2020):

- through an extensive programme of regular meetings and a formal supplementary question process; and
- across GT, ET and ESO we responded to a total of 871 supplementary questions from Ofgem.

Consumer research (July – Aug 2020)

- to ensure our business plan proposals continue to be aligned with the needs of consumers, we undertook a nationally representative survey of 4,018 members of the public; and
- we sought views on the importance of investment or cutting costs with regards to potential priorities in the energy sector; which investment/cost-saving priorities are most important; and the level of support or opposition for changes in energy bills to support investment priorities.

A series of webinars across the year open to all interested parties on: the content of our business plan, the content of the Draft Determinations and our response to the Draft Determinations

- open to our full distribution list of interested parties, attended by customers, suppliers, local community representatives, consumer representatives, trade bodies, regulators and investors;
- separate sessions held with internal colleagues; and
- providing the opportunity to inform stakeholders of the latest developments and the impact on their priorities, coupled with Q&A sessions.

Our commitment to being a responsible business

We have conducted a comprehensive review of our approach to being a responsible business, focusing on where we can create the most positive impact for society.

Responsibility at National Grid

Our purpose is to 'Bring Energy to Life' and we do this through the delivery of the electricity and gas that powers our customers and communities; safely, reliably, fairly and affordably, and this is the core of our role as a responsible citizen. It is also vital to focus on *how* we fulfil our purpose, minimising negative impacts and enhancing our overall contribution to society.

During 2019/20, we undertook a comprehensive review of our approach to responsible business, involving extensive stakeholder engagement and benchmarking. The results of this review reconfirmed priority issues, for example the health, safety and wellbeing of our employees, but also the need to accelerate our programme in other areas. This includes our commitment to achieving net zero by 2050 but also a series of new commitments in our Responsible Business Charter (RBC), published in October 2020, which will be updated on a regular basis. We are embedding the commitments identified in the RBC into our business plans under five headings: the environment, our communities, our colleagues, the economy and our governance. Performance is being assessed regularly.

Our approach to reporting

We have published a separate Responsible Business Report (RBR) for 2020/21 which has been guided by internationally recognised reporting standards. The RBR contains information relating to our material focus areas and provides detail on our management approach, performance, and the new commitments set out in the RBC. Certain metrics are subject to independent external assurance.

This section of our Annual Report provides a high-level summary of our approach to responsible business and meets regulatory requirements with regard to certain responsible business-related topics.

Our principles of responsible business

> **"We have published our responsible business charter and our first responsible business report."**

Our approach to managing responsible business matters

Our overall approach to responsible business can be summarised as:

- identifying our key stakeholders, understanding how they interact with our operations, activities and value chain, and the issues that are relevant to them;
- adopting a logical process for prioritising those issues, to identify the most material matters; and
- responding to the priorities by developing appropriate strategies, policies, programmes, targets and performance indicators, and reporting regularly and transparently on our progress.

In establishing our priorities we are also guided by recognised frameworks such as the United Nations Global Compact Principles and Sustainable Development Goals.

Over the years we have developed a series of processes and policies to ensure responsibility issues are managed effectively, and we are now updating these to ensure we deliver on our new RBC commitments. Our management approach to responsible business includes the following components:

Our policies and related governance

Descriptions of the policies and the outcomes pursued in relation to the matters listed on page 60, are discussed, where material, throughout this section and our RBR. A full list of our policies, and our Code of Ethics, can be found online, at nationalgrid.com/about-us/corporate-governance.

In addition to our policies, we have a suite of Business Management System (BMS) standards. These standards define the minimum requirements for the high value and risk activities most important to our business and deliver benefit by mitigating risk, enhancing best-practice sharing, standardising processes and simplifying our approach to doing business.

A non-exhaustive list of BMS standards, summarised for the purpose of the Non-Financial Information Statement, can be seen below.

Policies and documentation

People

- our Code of Ethics for employees: protects our reputation and helps ensure we maintain stakeholder confidence.
- the Wellbeing and Health BMS Standard: enables our business to manage health risks.
- the Occupational Safety BMS Standard: helps to ensure a consistent and high level of protection for employee and contractor safety.
- the Process Safety BMS Standard: helps to protect people and the environment from the risk of major accidents.
- the Human Resources BMS Standard: sets out expectations of leaders when managing employees across the employment lifecycle.
- the Performance Excellence BMS Standard: sets out how we 'find a better way', supporting continuous improvement.

Environment

- the Environmental Sustainability BMS Standard: establishes environmental compliance and environmental sustainability performance requirements for all operational and non-operational activities.

Society

- the Stakeholder Engagement BMS Standard: defines consistent performance requirements for external stakeholder engagement.
- Code of Ethics and Anti-Financial Crimes Policy.
- Procurement Standard: defines how to improve efficiency within our supply chain expenditure.
- Global Supplier Code of Conduct.

Case study – Grid for Good

Grid for Good will deliver social mobility for disconnected young people in the communities we serve by facilitating upskilling and employment opportunities in our sector. This also helps to address the net zero skills gap and improve workforce diversity.

Grid for Good aims to deliver ambitious upskilling targets in our RBC and focuses on 16–24-year-olds who have left school and face significant barriers to entering the workforce.

Candidates will be provided with opportunities such as peer networking, upskilling and mentorship. Our charity partners will engage and connect young people to the programme and support them through the process. At 31 March 2021, 1,261 young people were progressing along this pathway – made up of 792 in the UK and 469 in the US, and five young people had been employed at National Grid through Grid for Good.

We also encourage employees to volunteer to support the programme and during the year 6,207 hours of volunteering were delivered, mainly relating to mentoring opportunities.

Our commitment to being a responsible business continued

Our communities

Engaging with our communities

We seek regular feedback from our customers and communities and take action to improve performance.

Our approach to responsibility in our communities has been to go beyond providing the safe, resilient energy systems society expects, and work to ensure our economic and social role has the greatest possible impact. This involves developing infrastructure and helping consumers use energy more efficiently but also includes partnering with charity organisations and encouraging employees to volunteer in the community.

Core service delivery

The technological and environmental benefits of the clean energy transition should benefit everyone, and we will play our role in ensuring that no-one is left behind. A fully decarbonised transportation infrastructure, for example, should be accessible by everyone across the communities we serve. Part of this role includes protecting vulnerable customers, and in the US we already do this through low-income programmes, bill discounts and free energy efficiency advice. COVID-19 has brought serious economic hardship to many of our customers and each of our US jurisdictions last year ordered extended moratoria on disconnection for non-payment, which we upheld.

Our RBC commitments

- Deliver energy in a fair and affordable way to the communities we serve.
- Play our role in ensuring no-one is left behind in the transition to clean energy. The associated benefits should be enjoyed by all.
- Continue to reinvest in energy infrastructure at approximately £5 billion each year.
- Report transparently on energy costs throughout the energy transition – on average costs per household for our UK transmission networks and for our US electric and gas distribution businesses.

In the UK, we established a £150 million Warm Homes Fund (WHF) designed to support local authorities and others to help approximately 50,000 households suffering from fuel poverty. At the beginning of the year, approximately £26 million of the WHF remained unallocated, but this has now been earmarked across a range of projects, including programmes with National Energy Action, Connect for Help and the Fuel Bank Foundation.

We are helping customers to manage their energy use better, reducing cost and carbon emissions. We are a leading utility for energy efficiency in the US, and our Massachusetts Electric utility energy efficiency programme was ranked top by the American Council for an Energy-Efficient Economy.

As we transition to an increasingly complex electricity system, managing intermittent renewables and two-way power flows, we must maintain customers' expectations for reliable energy supply. Climate change will place stress on networks, and we will need to be prepared for extreme weather events. In the US, our recovery and response to Hurricane Isaias and the October Micro-Burst/Tornado/Derecho received multiple awards in 2020 from the Edison Electric Institute and the North Atlantic Mutual Assistance Group. You can read more about this on page 42, and find out how we manage our operational risks on pages 24 – 27.

Our UK and US networks continue to maintain excellent reliability, and our performance can be seen on page 21.

Supporting communities to thrive

We partner with community organisations to enhance our programmes. We have engaged with a series of societal issues and support a broad range of causes, relating mainly to educational and environmental programmes in the communities we serve through our core business, or those impacted by our capital projects. In 2020 we sharpened our focus.

Our RBC commitments

- Develop skills for the future, with a focus on lower-income communities, providing access to skills development for 45,000 people by 2030. Through upskilling young people with STEM skills, we will positively impact lives and help to grow the future energy workforce needed to enable the clean energy transition.
- Achieve 500,000 employee volunteering hours by 2030. Through volunteering, our people will help equip the next and future generations to participate in the clean energy transition.

Unemployment and social exclusion amongst young people existed before the COVID-19 pandemic, but the economic downturn in the UK and US has seen youth unemployment rise steeply. At the same time our research indicates a potential skills gap of 400,000 people to complete the clean energy system transition. We have linked these two factors and committed to supporting disadvantaged young people to build careers in the energy sector. We are showing this support for communities in the US and the UK through our flagship programme Grid for Good, described in the case study on page 53.

> **"We have launched our flagship community investment programme – Grid for Good."**

In the UK, we also support communities affected by our infrastructure projects, where grants are available for local projects, which deliver social, economic or environmental benefits. In addition, as part of capital delivery projects, we partner with third-party organisations to deliver community benefits at scale.

In the US, we support the National Grid Foundation, a non-profit charitable organisation. The Foundation awards grants to non-profit organisations to improve the lives of the underserved in the communities where we operate, focused on educational and environmental challenges. The Foundation currently disburses approximately $2 million per annum. The US business also provides funding of approximately $7 million per annum through centrally led programmes in support of organisations such as the Red Cross, City Year and Girls Inc., and programmes led more locally, identified by management teams in New York, Massachusetts and Rhode Island.

During the year, we recorded over 18,050 hours volunteered by our colleagues in support of a variety of causes, including Grid for Good. This is good progress but we are aware we will need to reinforce and innovate our programmes in order to meet our 2030 commitment above.

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The economy

We help national and regional governments formulate and deliver their energy policies and commitments. Our approach to regulatory consultation is to seek a framework that puts consumers at the centre of our price control, while enabling the clean energy transition which will be key in protecting future economic growth, safety and wellbeing in society.

Our RBC commitments

- Maintain reinvestment in our infrastructure and demonstrate the social benefits of our capital delivery programmes.
- Continue to invest in developing technologies and innovations that benefit our customers and wider society.
- Work across our supply chains to ensure that, together, we reflect the diversity of the communities we serve and respond to the economic needs of those communities.
- Continue to influence our supply chain to operate as responsible businesses.

Our economic contribution to society comes primarily through the delivery of safe and reliable energy but also through our role as an employer, a tax contributor, a business partner, and community partner.

During the year, we invested £5 billion in our energy infrastructure (see page 19). We published our green financing framework in November 2019, and since then have issued bonds from our UK and US electricity businesses, most recently in June 2020, funding projects to enable the transition to clean energy. We also issued, in April 2020, the first ever multi export credit agency covered green loan in relation to the construction of the Viking Link interconnector. More information is available in our first Green Financing Report.

National Grid Partners ('NGP') is the venture investment and innovation arm of National Grid with a portfolio which comprises 23 companies and four fund investments at a fair value of £178 million at the close of the fiscal year. NGP investments and innovation projects include initiatives which directly support the goals of our RBC. Further details are provided in the RBR and on page 23.

Our approach to tax is part of our commitment to being a responsible business, and is guided by our values. We are committed to a coherent and transparent tax strategy and details of this are set out on page 36.

We aim to build partnerships with small and local businesses, and all suppliers who set clear ambitions related to the environment, diversity, economic wellbeing and governance. We are fair to our suppliers and committed to paying them promptly. In the UK and US, over 90% of supplier payments were made to contractual terms.

We also influence our supply chain to operate as responsible businesses, requiring all suppliers to share our commitment to respecting, protecting and promoting human rights. Through our Global Supplier Code of Conduct we expect our suppliers to comply with all applicable local, state, federal, national and international laws or regulations including the UK Bribery Act 2010 and the US Foreign Corrupt Practices Act 1977. We also require them to adhere to the Principles of the United Nations Global Compact, the International Labour Organisation minimum standards, the Ethical Trading Initiative Base Code, the US Victims of Trafficking and Violence Protection Act 2000 and, for our UK suppliers, the requirements of the Living Wage Foundation.

> **"49% of our top 250 suppliers have set climate change targets."**

We provide specific guidance and briefings for high-risk areas, to reduce the risk that contractors, agents and others who are acting on behalf of National Grid, engage in any illegal or improper conduct. We expect all our suppliers to be compliant with the UK Modern Slavery Act and to publish a Statement. Each year, we update our own Statement and publish this on our Company website in line with the Modern Slavery Act's requirements and this provides details on our relevant policies and processes, such as pre-qualification screening. We continue to actively support the United Nations Global Compact Modern Slavery Working Group, Gangmasters Labour Abuse Authority Construction Protocol, the Supply Chain Sustainability School and the Slave Free Alliance, where we helped to establish the Utilities Sector Modern Slavery Working Group.

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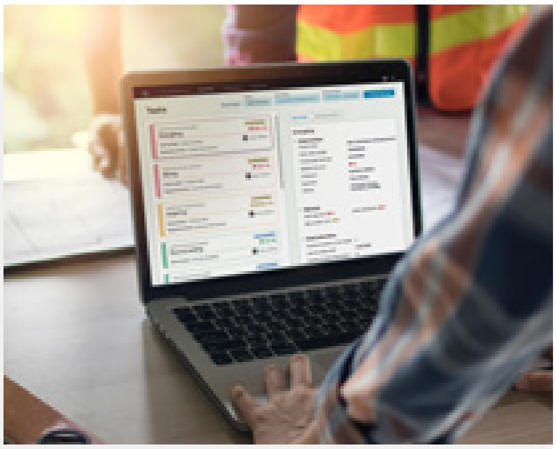


Innovation to improve reliability and reduce costs

In the US, before contractors carry out excavations, they must call '811' so that utility operators can identify buried infrastructure and thus prevent damage and injury. Given the potential safety, reliability and cost impacts from excavation damage, National Grid US maintains active 'Damage Prevention' teams to monitor inbound '811 tickets', find contractors who haven't obtained tickets, and stop accidents before they happen.

In downstate New York we reduced the damages for nearly a decade before plateauing. Colleagues had to identify higher-risk excavations by 'feel' as there were insufficient resources to manually assess 600,000 tickets per year.

In 2016, we partnered with Urbint, to drive the rate lower. Urbint's AI-powered software, 'Lens for Damage Prevention', examines historical incident data as well as the age, type, and location of assets. It combines this with a representation of forces that impact underground assets including soil conditions, elevation, weather, population density, and construction and assigns risk scores to 811 tickets.

Results showed most damages were coming from a small percentage of tickets, with one of the strongest predictors being the contractor doing the work. By targeting problem excavators and proactively intervening on risky job sites, we reduced our damage rate by 37% from 2016 to 2020 and improved our relationships with excavators.

Recognising the power of innovation to improve our service capabilities, National Grid Partners, our strategic investment and innovation arm, invested in Urbint in 2019.

Our commitment to being a responsible business continued

The Environment

We recognise that, as a result of our activities, we create negative impacts on the environment and understand that a damaged environment has broader consequences for the health and wellbeing of society. Climate change is the defining challenge of this generation and in our role at the heart of the energy system we understand the critical role we need to play. The markets in which we operate have announced ambitious carbon reduction targets and further legislative actions are anticipated as indicated on page 15.

The biggest contribution we can make is through enabling an economy-wide clean energy transition, but we must also reduce our own impact on the environment.

Supporting the clean energy transition

Our RBC sets out how we aim to play a leading role in enabling and accelerating the transition to a clean energy system; balancing decarbonisation, affordability and reliability of supply. Working closely with government and other stakeholders and partners around the world, we focus on the technical and commercial solutions that will help achieve net zero for the energy sector. Initiatives include:

- electricity – connecting renewables as quickly and efficiently as possible, investing in grid modernisation, enhancing demand-side management through our energy efficiency and demand-side response programmes and continuing to develop interconnectors to bring low-carbon energy to the UK;
- renewables – continuing to grow our renewables business in the US from the foundation provided by our wind and solar generation business, National Grid Renewables;
- transport – supporting development of vehicle charging infrastructure in the UK and US, and low-carbon alternatives, such as hydrogen, for heavy transport;
- heat – working with our customers and regulators on this challenging issue to enable a range of potential solutions, including heat pumps, and renewable natural gas and hydrogen in our networks, as well as helping consumers switch from the most polluting heating fuels, such as oil;
- natural gas – continuing to help develop and deploy new technologies to decarbonise at scale in the years ahead – such as hydrogen networks and carbon capture, utilisation and storage (CCUS).

Reducing our own environmental impacts

In 2012, we developed our environmental sustainability strategy, ‘Our Contribution’, to set a framework for embedding sustainable decision-making into our business operations. We focused on three key areas – climate change, responsible use of natural resources and caring for the natural environment – and set targets to deliver progress through to the end of 2020. This programme has now been superseded by our new, more ambitious, commitments in the RBC.

Climate change

We generate GHG emissions across Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of gas and electricity) and Scope 3 (other indirect emissions from activities and sources outside of our ownership or control). Our RBC sets out a number of ambitious climate-related commitments, the most significant of which is to achieve net zero by 2050. Through this commitment we will reduce Scope 1 and 2 emissions by 80% by 2030, 90% by 2040, and to net zero by 2050, from a 1990 baseline. A key GHG target from ‘Our Contribution’ was for a 45% reduction in GHG emissions by 2020, from a 1990 baseline. At the end of 2020/21, we have achieved a 68% reduction.

In recent months, we have worked closely with the Science Based Targets initiative (SBTi) to increase the ambition of our Scope 3 target and this now covers emissions across our entire value chain – not just the energy we sell – with a commitment to reduce the carbon emissions by 37.5% by financial year 2034 (from a financial year 2019 baseline). Our interim Scope 1, 2 and 3 emission reduction targets are verified by the SBTi, demonstrating a clear, credible commitment to deliver our longer-term net zero strategy in line with a well below 2°C pathway. Other commitments, including those relating to reductions in SF_6 emissions and increasing the proportion of electric vehicles in our own fleet, are set out in the RBC.

We have announced our intention to put our climate transition plan before shareholders and seek a non-binding advisory vote on our net zero commitment and associated Scope 3 target, and the action plan to achieve the interim 2030 net zero target. In this way, we will be directly accountable to shareholders for our progress on tackling climate change.

We are working to reduce our business travel emissions by changing to alternative fuel vehicles and reducing business flights. The response required by COVID-19 (see page 8) has resulted in more flexible ways of working and has reduced business travel. We will reduce the energy consumed in our buildings and procure green energy where possible.

Electrification of transport

In the US, we have actively supported transportation electrification for over ten years by installing and managing charging stations, and providing support and incentives for our customers to enable adoption and deployment. By the end of March 2021, we had enabled 2,500 EV charging ports across our jurisdictions. Our main programmes include:

- making sites ready for customers to easily and cheaply install EV charging stations, including all of the infrastructure needed to support EV chargers or EV supply equipment, and in some states we even provide rebates for the charger itself;
- assisting customers to plan for large-scale fleet electrification, including an electricity bill impact analysis, a site feasibility analysis, vehicle assessments, and a comprehensive roadmap to electrification; and
- providing off-peak charging incentives to our residential customers in Massachusetts and Rhode Island to gather information on EV charging behaviour to help us design better charging incentives for future programmes.

We aim to lead by example and have invested more than $1.8 million for Company vehicle electrification in 2020, including heavy equipment such as excavators, forklifts and backhoe diggers. We continue to make progress towards electrification of 100% of the light-duty vehicles by 2030, and project that more than 50% of our fleet passenger cars in the US will be electric within 12 months. Since our EV Central programme launched in April 2018, 484 employees have taken advantage of financial incentives to purchase or lease an EV.

Our Scope 1 emissions were 4,727 $ktCO_2e$, a 21.1% increase on the prior year (3,903 $ktCO_2e$). Of this, 86% arose in the US, 14% in the UK. The increase resulted mainly from generation emissions exceeding projected levels due to increased LIPA operating hours, required to replace shortfalls in off-island generation and transmission.

Scope 2 emissions are reported on a market basis and location basis:

- market basis – 2,264 $ktCO_2e$, a 13.7% reduction on the prior year
- location basis – 2,216 $ktCO_2e$, a 14.1% reduction on the prior year.

Approximately 61% of Scope 2 emissions (location basis) were generated in the UK, with the remainder through US operations. Reduction in Scope 2 emissions was mainly due to a reduction in emissions from line losses, resulting from a reduction in grid electricity carbon intensity.

Our combined Scope 1 and Scope 2 (location-based) emissions are now 68% below our 1990 baseline.

Our total Scope 3 emissions are calculated as 28,948 $ktCO_2e$ for the year, a reduction of 6.2% on the prior year.

The sources of Scope 1, 2 and 3 emissions are detailed in the RBR. We have also published a document, 'Reporting Methodology', which details the methodologies and protocols used for calculating key responsible business metrics.

Strategy in action

Case study – involvement in COP26

National Grid is a principal partner for COP26, the annual global climate change summit to be hosted in the UK in November 2021. COP26 is arguably the most important climate event since the 2015 Paris Agreement, as governments around the world will be reporting back on progress and agreeing new actions to cut carbon emissions. We are working closely with the UK government in planning for COP26, as well as hosting and participating in events and exhibition spaces in the Blue and Green Zones at the two-week summit. We are excited to play our part in supporting the UK government, along with our fellow partners and many others, to deliver a successful COP26 which encourages and inspires ambitious action to tackle climate change in this critical decade.

Understanding National Grid's greenhouse gas emissions

We monitor and report our greenhouse gas emissions in accordance with the World Resources Institute and World Business Council on Sustainable Development Greenhouse Gas Protocol.

Scope 1: Direct Emissions from the operational activities of National Grid.

Scope 2: Indirect Emissions from gas and electricity purchased and used by National Grid.

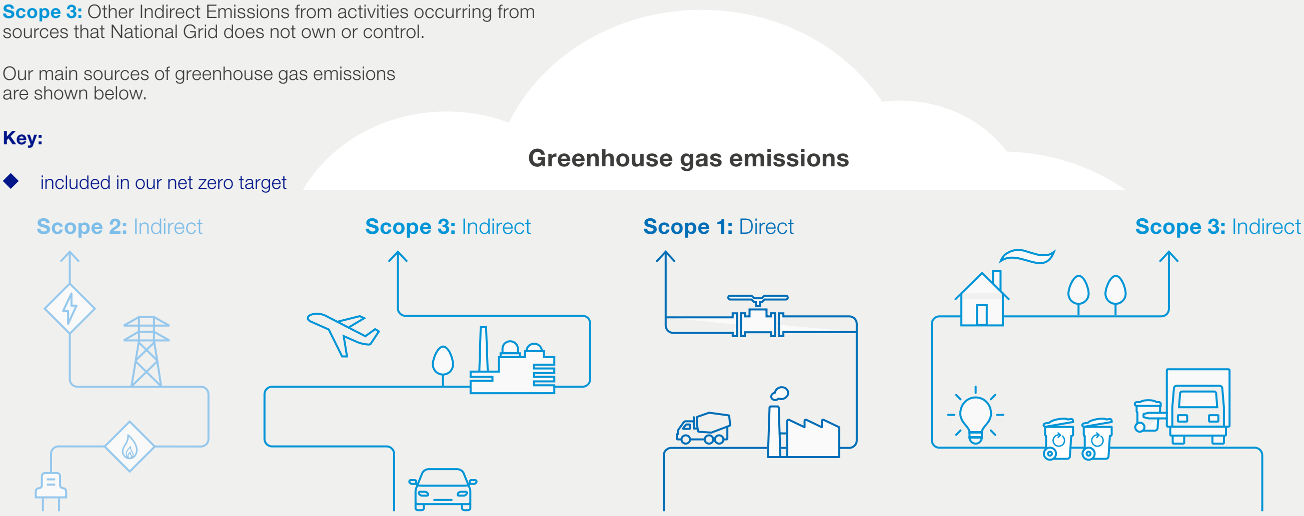
Scope 3: Other Indirect Emissions from activities occurring from sources that National Grid does not own or control.

Our main sources of greenhouse gas emissions are shown below.

We have committed to achieving net zero emissions for our Scope 1 and 2 emissions by 2050. Most of our Scope 3 emissions are emitted from two key business activities: the sale of gas and electricity to customers in the US and the purchase of goods and services.

Key:

◆ included in our net zero target



Upstream

Scope 2 ◆

- Line losses from our electricity transmission and distribution lines
- Energy purchased for use at our facilities
- Use of electric drive compressors in our gas business

Scope 3

- Purchased goods and services
- Business travel
- Employee commuting

Our operations

Scope 1 ◆

- LIPA electricity generation
- Leaks and venting from our gas transmission and distribution systems
- SF_6 leaks from our electric equipment
- Fleet vehicle use
- Gas-fired compressor use

Downstream

Scope 3

- Use of 'sold product' or emissions from our customers' use of the gas and electricity we purchase on their behalf
- Waste management

Our commitment to being a responsible business continued

Energy consumption
Our energy consumption is a key area of focus as this, in turn, drives our carbon emissions.

Our energy consumption consists of both fuel consumed and energy purchased from third parties, including renewable energy. Total energy consumption was 2,602 GWh (9,367,585 Gj), a decrease of 16.5% on the previous year. Of this, 99% was from non-renewable sources, with no significant change from the previous year.

Operational energy use was 1,409 GWh (2019/20 – 1,676 GWh), our transport energy use was 378 GWh (2019/20 – 384 GWh), electricity purchased was 659 GWh (2019/20 – 922 GWh) and heating was 156 GWh (2019/20 – 133 GWh).

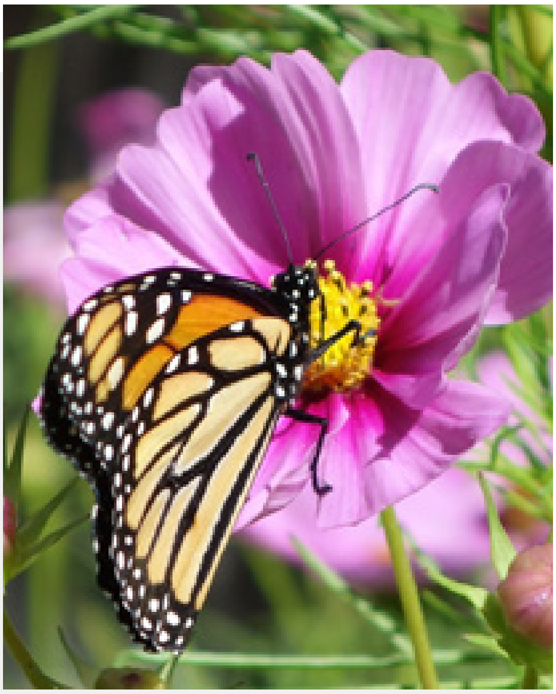
Electricity consumption includes the energy consumed in operating the generation assets in the US. Total energy does not include fuels consumed for power generation on behalf of LIPA, the contracting body, amounting to 16,155 GWh (net of energy required to operate the generation assets), a 28% increase on the prior year. Transport covers business travel, including our own fleet, hire cars and personal car use for business. In addition to energy consumed, we calculate that system losses accounted for a further 11,154GWh, of which 52% occurred in the US. This was a 9% decrease on the previous year.

The comparative data, previously reported in the 2019/20 Annual Report, has been restated to account for a minor misstatement and a change in reporting methodology.

Responsible use of natural resources
Waste is generated from a range of activities and sources, including office and warehouse waste, waste from distribution and transmission gas pipe and electricity line laying, repair and maintenance, some capital project delivery and power generation. Our reporting currently excludes certain predominantly non-hazardous civil wastes managed by contractors as part of large-scale capital projects e.g. tunnelling, where the data cannot yet be captured reliably. We now redirect all office waste from landfill, and almost 80% of the waste we can record is either reused or recycled.

Caring for the natural environment
We must also address the challenge of restoring the natural environment. Using our own land and working with partners, we have an opportunity to cut carbon and restore nature at the same time. We are improving the natural environment on our own land by protecting habitats and increasing biodiversity using best practice methods, such as natural capital evaluation, so we can make sure we create the most benefit. In our RBC we have committed to improve the natural environment by 10% on the land we own, by 2030.

More detailed information on our environmental impacts and programmes are presented in the RBR.



Supporting the monarch butterfly
In the US, we have enrolled in the Monarch Candidate Conservation Agreement with Assurances (CCAA), which is a voluntary conservation programme on energy and transportation lands that will result in a net benefit to monarch butterflies. This is a partnership between the U.S. Fish & Wildlife Service and energy and transportation entities across the country, with a nationwide goal of enrolling up to 26 million acres of land and contributing over 300 million stems of milkweed and 2.3 million acres of monarch foraging habitat. Our commitment relates to conservation measures across over 100,000 acres, include seeding and planting to restore or create habitat and conservation mowing and scrub clearance to enhance floral resource habitat.

Our colleagues

We are reliant on our colleagues to deliver success for the business. We aim to attract and retain the best people by striving to be recognised as an employer of choice. People are attracted to work for businesses which can demonstrate a clear purpose that benefits society. It is important for us to match their aspirations, and we work towards going beyond delivery on the core aspects of the employer/employee relationship, to create a culture focused on the value we can add to society.

Engaging with our colleagues

We engage extensively with our colleagues and conduct an annual independently managed survey, the Grid:voice survey, to help us identify areas that employees believe we need to improve. You can read more about this on pages 22 and 49, and in the RBR.

Health, safety and wellbeing

We have a fundamental duty of care to ensure our employees are kept safe at work, and that their health is not impacted as a result of their employment. The health, safety and wellbeing of employees and contractors is our primary concern. Any safety incident is one too many, and we work to improve our performance through effective policies, standards, procedures and training. It is therefore with deep regret that we report that, in November 2020 in the US, a tragic event took the life of one of our contractor colleagues.

We measure safety performance through a combination of leading and lagging indicators and Lost Time Injury Frequency Rate is one of the core KPIs of the business (see page 22). We take a proactive, risk-based approach to managing health and wellbeing and have documented standards relating to occupational health and safety, process safety and wellbeing and health. Incidents are reported to the highest level, and the SEH Committee of the Board undertakes regular deep dives on safety-related topics (see page 89).

COVID-19 has dominated the year for our employees, and the full story of our response is reported on page 8.

Investing in our colleagues

Responsibility towards our people also means training and (re)skilling them for the evolving needs of our businesses. We have identified the need to enhance skills relating to the clean energy transition, for example, implementing new energy technologies, such as renewables and heat pumps. This need for new skills will be partly met through our community initiatives such as Grid for Good (see page 16). We operate training centres in the US and UK providing specialist technical, safety, refresher and new starter development programmes, and a leadership academy. All training programmes have been affected by the COVID-19 situation, and we have adapted our training approach accordingly. Further information on employee development is provided in our RBR.

Living wage and gender pay gap

We believe that everyone should be appropriately rewarded for their time and effort. In the UK, we are accredited by the Living Wage Foundation, a commitment which extends to our contractors and the work they do on our behalf. We also go above the Living Wage requirements and voluntarily pay our trainees the Living Wage. We undertake a Living Wage review each year to ensure continued alignment and increase individual salaries as required and also promote the commitment to our suppliers.

We review gender and ethnicity pay gaps annually in both the UK and US, and further information is provided in the RBR.

Promoting an inclusive and diverse workforce

Our RBC commits us to be as transparent as possible internally and externally on gender and ethnicity. We have a commitment to achieve 50% diversity, in our Senior Leadership Group and in all our new talent programmes, by 2025. For these purposes a diverse employee is defined as a colleague who identifies as female, as a person with a disability, as gay, bi-sexual or lesbian or from an under-represented ethnic or racially diverse background. We aim for our workforce to reflect the diversity of the communities we serve and are committed to providing an inclusive, equal and fair working environment.

We have appointed a Chief Diversity Officer, who will partner with senior executives across the business to develop a new inclusion and diversity strategy and drive progress. We have 16 Employee Resource Groups (ERGs) (11 in the US; 5 in the UK), which are all highly active and visible across the business.

"Our employee engagement score has increased"

Grid:voice engagement score

81%

(2019/20: 77)

We continue to be recognised in awards and benchmarks including being listed, in the US, as one of the Best Places to Work for LGBTQ Equality (Human Rights Campaign), one of the Best Employers for Diversity 2020 (Forbes) and one of our UK ERGs was awarded 'Top Network Group' at The Ethnicity Awards in 2020. We have close partnerships with external best practice organisations and are active members of sector- and industry-wide groups which ensure we are sharing best practice and campaigning at a sector-wide level for greater inclusion for all.

Our policy is that people who identify as having a disability should be given fair consideration for all vacancies against the requirements for the role. Where possible, we make reasonable accommodations and provide additional resources for employees who identify as having a disability. We are committed to equal opportunity in recruitment, promotion and career development for all colleagues, including those with disabilities.

The gender demographic table below shows the breakdown in numbers of employees by gender at different levels of the organisation. We have included information relating to subsidiary directors, in accordance with the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. 'Senior management' is defined as those managers who are at the same level, or one level below, the Group Executive Committee. Our definition also includes those who are directors of subsidiaries, or who have responsibility for planning, directing or controlling the activities of the Group, or a strategically significant part of the Group, and are employees of the Group. For further, more detailed information and relating to our approach and performance on gender and ethnic diversity, please see our RBR.

Gender demographic as at 31 March 2021

	Our Board[1]	Senior management[2]	Whole company[3]
	number	number	number
Male	8	167	17,737
Female	5	89	5,810
Total	**13**	**256**	**23,547**[4]
Male (%)	61.5%	65.2%	75.3%
Female (%)	38.5%	34.8%	24.7%

1. 'Board' refers to members as defined on the Company website.
2. 'Senior management' refers to Band A/B employees as well as subsidiary directors.
3. This measure is also one of our Company KPIs. For more information, see page 22.
4. Does not include data from our National Grid Renewables business.

Our commitment to being a responsible business continued

Governance

Adopting the right approach to governance is critical to the success of our business. This encompasses everything from adopting the correct structures for Board oversight, to how we listen to the voices of our stakeholders, manage risk and ensure we maintain an appropriate culture and the highest ethical standards. Our RBC commits us to applying a corporate governance model that supports all our responsible business commitments and ambitions and applies our responsible business framework to everything we do.

The gender diversity of our Board is currently 38.5% (see page 72).

> **"Board gender diversity is 38.5%."**

Stakeholder engagement

We prioritise our responsibilities to our different but interrelated stakeholder groups and wider society. We have extensive and detailed processes to ensure we understand the interests of our stakeholders and reflect them in the decisions we make. Stakeholder engagement plays an important role in how our Board ensures responsibility in governance. This includes listening to our stakeholders' views, inviting external guests to meetings, and using independent research to bring the voice of the customer and other stakeholders into the boardroom. Further information is provided on pages 46 – 51, and in our RBR.

Highest ethical standards – ethical business conduct

We regard the potential for bribery and corruption as a significant risk to the business and have established policies and governance that set and monitor our approach to preventing financial crimes, fraud, bribery and corruption, including our Code of Ethics (covering anti-bribery and anti-corruption). We have a Company-wide framework of controls designed to prevent and detect bribery.

Our Code sets out the standards and behaviours we expect from all employees to meet our values of 'do the right thing', 'find a better way' and 'make it happen'. The document is issued to all employees and is supported by a global communication and training programme to promote a strong ethical culture. Our UK and US Ethics and Compliance Committees (ECC) oversee the Code of Ethics and associated awareness programmes. We operate an e-learning course for all employees so they can adequately understand the Company's zero-tolerance approach to fraud, bribery or corruption of any kind.

We also have an Anti-Financial Crimes policy which applies to all employees and those working on our behalf. It sets out our zero-tolerance approach to bribery, fraud, money laundering, tax evasion and other corrupt business practices. To ensure compliance with the UK Bribery Act 2010 and other relevant legislation, we operate an anti-financial crime risk assessment process across the Company to identify higher-risk areas and make sure adequate procedures are in place to address them.

Any cases alleging bribery are referred immediately to the relevant ECC so the members can satisfy themselves that cases are managed effectively, including ensuring any lessons learnt are communicated across the business. We investigate all allegations of ethical misconduct thoroughly and take corrective action and share learnings. We also record trends and metrics relating to such allegations.

Additionally, we provide briefings for high-risk areas of the business, such as procurement. Our Code is reviewed every three years and was last updated in November 2020, and this is supported by our Ethics Business Management Standard which provides a framework around our ethics programme and describes what is expected of the business.

Each of our business areas is required to consider its specific risks and maintain a compliance framework, setting out the controls it has in place to detect and prevent bribery. Business areas self-assess the effectiveness of controls and provide evidence that supports reported compliance. Each year, all function heads are asked to certify the compliance in their area, and to provide details of any exceptions. This culminates in the presentation of a Certificate of Assurance from the Chief Executive to the Board (following consideration by the Audit Committee). You can read more about the Audit Committee's role, including its ongoing assessment of the adequacy of our anti-bribery and anti-corruption policies and processes, on pages 83 – 87. None of our investigations over the last 12 months have identified cases of bribery.

Highest ethical standards – human rights

Respect for human rights is incorporated into our employment practices and our values, which are integral to our Code of Ethics. This is vital in maintaining our reputation as a company that our stakeholders want to do business with, and that our employees want to work for.

Although we do not have specific policies relating to human rights, slavery or human trafficking, we do cover these issues through related policies and procedures such as our approach to diversity, anti-discrimination, privacy, equal opportunity and, in addition, our Global Supplier Code of Conduct integrates human rights into the way we screen and interact with our supply chain. For more information see page 245, and our RBR.

Whistleblowing

We have a confidential internal helpline, and an external 'Speak-Up' helpline that is available at all times in all the regions where we operate. We publicise the contact information to our colleagues and on our external website so concerns can be reported anonymously. Our policies make it clear that we will support and protect whistleblowers and any form of retaliation will not be tolerated.

We have again been recognised by Ethisphere as one of 2020's World's Most Ethical Companies.

Non-financial information

This section provides information as required by regulation in relation to:

- environmental matters – pages 56 – 58;
- our employees – page 59;
- social matters – pages 53 – 55;
- human rights – page 60 and page 245; and
- anti-corruption and anti-bribery – page 60 (see also pages 83 and 86.

In addition, other information describing the business relationships, products and services which are likely to cause adverse impacts in relation to the matters above, can be found as follows:

- business model – pages 4 – 7;
- KPIs – pages 20 – 22;
- principal risks – pages 25 – 27; and
- Audit Committee Report (our due diligence) – pages 83 – 87.

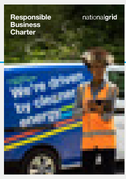
Task Force on Climate-related Financial Disclosures (TCFD)

National Grid has committed to implementing the recommendations of the TCFD in full, and this is our fourth disclosure. We are committed to developing a business model that is consistent with the objectives of the Paris Agreement, and therefore set a commitment in November 2019 to reduce our Scope 1 and 2 emissions to net zero by 2050. The details of the interim targets that we have set to achieve this are included in our Responsible Business Charter (RBC) that we published in October 2020. This year, alongside the Annual Report and Accounts (ARA), we are publishing our first Responsible Business Report (RBR) which details our progress against the commitments set out in our RBC.

This year we have continued to make strong progress on full compliance with the recommendations of the TCFD. In last year's disclosure, we outlined actions that we planned to progress during 2020/21. To address those actions, we have progressed our scenario analysis of the physical risks to our assets using updated climate scenarios, developed our RBR and updated our Company strategy to incorporate our net zero commitments. For the fifth consecutive year we received the prestigious climate change 'A' score from CDP Climate Change.

Highlights of the year:

- Publication of Responsible Business Charter



- CDP A rating for 5th year in a row
- Publication of our first Green Financing Report

- Published science-based targets for our Scope 1, 2 and 3 emissions
- Good progress on our physical impacts from climate change scenarios
- Announced acquisition of WPD and proposed disposals of NECO and National Grid Gas plc
- Continued development of net zero strategy throughout the Group and as reflected in RIIO-2 Final Determinations and US rate cases
- Held ESG virtual seminar and session on future of gas; principal partner for COP26

Governance of climate-related risks and opportunities

The Board's oversight

The Board of Directors is responsible for the oversight of climate-related risks and opportunities impacting the Group. They in turn delegate some elements of their responsibility to their various sub-committees, as set out in the diagram below:

Board of Directors: There has been an increased focus on climate-related matters at the Board level as the landscape continues to evolve with further regulatory developments and changes in stakeholder expectations. Board members presented alongside management at environment, social and governance (ESG) investor presentations during the year, including an ESG virtual seminar event in October 2020 and a follow-up session on the future of gas in January 2021. The expertise of the Board on ESG-related matters continues to be enhanced through regular interactions with management, regulators and government bodies on matters such as our net zero strategy. The Board will also be actively involved in COP26 taking place in Glasgow in November, for which National Grid is a principal partner. In addition, the Board was involved in the following discussions relevant to climate change:

- reviewed and approved the climate change principal risk as part of the annual risk review and challenge process. This risk is now owned by Justine Campbell, the Group General Counsel & Company Secretary and a member of the Group Executive Committee, having first been elevated to a principal risk in Autumn 2019;
- RIIO-2 Final Determinations which reflect our investment proposition for supporting the UK energy transition;
- quarterly reviews of performance on our environmental sustainability metrics and targets; and
- approved the acquisition of WPD to achieve a scale position in electricity distribution in the UK, which is expected to see a high level of asset growth as a result of the energy transition.

The **Audit Committee** remains responsible for reviewing and approving the content of our TCFD disclosures. The Audit Committee considered papers in March and May 2021 on the financial reporting and disclosure considerations in respect of climate change. The Audit Committee also oversees the development of the assurance model for our RBR and recommends to the Board the approval of the disclosures in our first RBR.

The **Finance Committee** is responsible for overseeing our financing strategy, including the issuance of our first Green Bonds in National Grid Electricity Transmission and Niagara Mohawk Power Corporation (NMPC). The Finance Committee also considers the financial impact of environmental factors on our credit metrics and relevant considerations with regards to debt investors.

The **Safety, Environment and Health Committee** (SEH Committee) is responsible for assessing the Group environmental sustainability strategy and performance, as well as how the Company adapts its business strategy considering potential climate change risks and opportunities. The SEH Committee monitors our environmental sustainability performance quarterly and approves updates to our environmental sustainability strategy and targets annually.

The **Remuneration Committee** is responsible for determining our remuneration policy, including how ESG factors are considered in the policy, and how they are taken into consideration in determining the final incentive pay decisions. For further detail on how such factors feature in executive remuneration, please refer to the Directors' Remuneration Report on pages 92 – 113.

The **Nominations Committee** is responsible for Board appointments and succession planning. In 2019, the Nominations Committee approved the appointments of Jonathan Silver, whose previous experience included leading the US Federal government's clean energy investment fund and Earl Shipp, who brings significant experience in safety, environmental and sustainability from his executive career.

A **TCFD steering group** comprised of representatives from Group Financial Reporting, Safety, Health and Sustainability, Corporate Strategy and Investor Relations oversees progress against the TCFD recommendations and the publication of our annual disclosure, and reports to the Chief Financial Officer. In addition, a new **Responsible Business steering group**, chaired by the Interim Group Corporate Affairs Director, has been set up to provide oversight of the integration of responsible business into National Grid, including the development of ESG targets and future ESG strategy. The steering group also provides oversight over ESG-related external reporting, including TCFD disclosures and is comprised of the Interim Group Corporate Affairs Director, Chief Financial Officer, Group General Counsel & Company Secretary and the Chief People and Culture Officer. Standing attendees include the Head of Responsible Business, Head of Safety, Sustainability, Health and Environment and the Group Financial Controller.

A **Green Financing Committee** chaired by the Group Treasurer, provides governance over our Green Financing Programme. In December 2020, the Green Financing Committee approved the publication of our first Green Financing Report, which provided an analysis of how we utilised the proceeds from our portfolio of Green Bonds and their environmental impact.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Management's role
Management is responsible for managing on a day-to-day basis the climate-related risks and opportunities faced by the Group and for delivering the roadmaps to achieve the net zero strategy set by the Board.

Responsibility for asset investment and maintenance planning, implementation of the net zero strategy and overseeing the development of the RBC is delegated by the Board to the **Group Executive Committee** which further delegates responsibility to the core operational businesses.

Our businesses are responsible for and held accountable for determining their local roadmaps for achieving net zero, including tracking and monitoring net zero metrics and targets at a local level:

- UK and US core businesses – responsible for managing the impacts of climate change on the assets within their businesses and working with local regulators to develop regulatory frameworks that enable the transition to net zero;
- Electricity System Operator – responsible for working with the energy industry to adapt the Great Britain (GB) electricity system to keep electricity flowing reliably with increasing renewable sources;
- National Grid Ventures (NGV) – responsible for identifying clean energy investment opportunities, such as large-scale renewables like wind and solar. NGV is also responsible for investing in our interconnector portfolio which is expected to import energy that is 90% zero carbon by 2030; and
- National Grid Partners (NGP) – responsible for incubating and investing in technology startups that can help National Grid achieve the energy transformation.

Our functions are responsible for supporting the businesses in achieving their net zero pathways:

- Corporate Affairs – responsible for external communications in regard to our net zero strategy, including the publication of the RBC and RBR;
- Group Finance – responsible for supporting the businesses to understand the financial impacts of net zero plans and producing external ESG metric reporting and disclosures, executing green financing and managing ESG investor communications;
- Safety, Health and Environment – responsible for assessing the Group environmental sustainability strategy and performance, monitoring our environmental sustainability performance quarterly and implementing the annual updates to our environmental sustainability strategy and targets; and
- Group Human Resources – responsible for integrating ESG targets into remuneration frameworks for approval by the Remuneration Committee.

Our role in the energy transition continues to be an area of increasing focus at all levels of the organisation, from Company-wide calls led by the Chief Executive on the commitments published in our RBC, to bespoke sessions run locally to develop and communicate the roadmaps for each business' contribution to achieving net zero. Previous training has been delivered in the US about how our role is changing on the pathway to 80% reduction by 2030. More formal training programmes in the UK which were paused due to the ongoing pandemic are currently being designed for roll-out throughout the business next year. Bespoke training has been delivered to specific roles where they need knowledge and skills to deliver against our targets.

Case Study: ESG virtual seminar

National Grid hosted an ESG virtual seminar on 5 October 2020, led by Chairman Sir Peter Gershon and Chief Executive John Pettigrew. The event provided an opportunity to hear from management across our UK, US and NGV businesses on our ESG achievements to date, and our ambitions for the future in areas such as the decarbonisation of electricity, transport and heat and the hydrogen studies that we are carrying out. Other Board members including Jonathan Dawson and Therese Esperdy also presented.

Following on from this seminar, in January 2021 we launched our 2021 ESG programme, the 'Grid Guide to…' series. These are short, virtual sessions giving the market a deeper understanding of the key themes and the innovative projects we're working on. The first event of the series was held on 21 January 2021 and focused on the future of gas.

Our strategy for responding to climate change

Overview of our climate-related risks and opportunities

The scale of ambition and speed of change required to meet net zero emission targets, along with the changes in temperature and weather patterns present both risks and opportunities to our business. These risks and opportunities, along with a summary of the work we are doing to address them, are presented in the table below. Short-, medium- and long-term timeframes are defined in our risk methodology as one year or less, one to three years and three or more years respectively, and this is reflected in the table below.

Risk/opportunity type and description	Our response
Markets Commercial opportunities from the transition towards net zero will continue to shape our portfolio and strategy. **Timeframe:** Short, medium and long-term **Impacted businesses:** Group-wide	The decarbonisation of transport and expansion of EV-charging infrastructure presents significant growth opportunities and was a driver behind our decision to increase our electricity footprint in the UK. We have also developed a strategy to enable the building of charging stations across our US jurisdictions and UK highways and NGET are looking at the decarbonisation of Heavy Goods Vehicles (HGVs), ensuring that all viable technologies are considered, refining the 2030 pathway for decarbonising transport based on industry feedback. The decarbonisation of heat presents significant opportunities for our electric businesses as electric heating solutions are sought for homes, offices and buildings. While the shift to electric heating provides a downside risk to our gas businesses, there are opportunities for our gas networks to be used to transport hydrogen. With the Committee on Climate Change expecting a 70% increase in UK electricity demand by 2050, our acquisition of WPD will enable us to play a pivotal role in enabling that growth. In both the UK and US, we continue to work with our regulators on decarbonisation plans as described below and have developed a dedicated programme to understand what is required to incorporate hydrogen into the gas supply, and in the UK we have developed a hydrogen trial where we will assess the impact of hydrogen on our existing assets. We also continue to invest in other technology, and in the Humber region in the UK we are leading the development of CCUS technology to support this area to become the first zero-carbon region in the world by 2040. In 2019, we acquired Geronimo, a leading developer of wind and solar generation assets based in Minneapolis, Minnesota. Geronimo was subsequently expanded and rebranded to NG Renewables and will help us to develop and grow a large-scale renewable business in the US. This is strengthened by the constant growth of NGV US Business Development and their investment in battery energy storage and medium- to large-scale renewable projects. We continue to invest in our interconnector portfolio which will form an important part of UK decarbonisation. Once Viking Link becomes commercially operational in 2023/24, NGV will hold 7.8 GW of interconnector capacity and the focus will switch to multi-purpose interconnectors which will increase interconnection and facilitate the construction and expansion of wind farms within the North Sea. We continue to invest in energy technology startups via our venture capital investment and innovation business NGP, having invested over $220 million in 25 companies and four external venture capital funds at the intersection of energy and emerging technologies.
Markets Regulatory outcomes/approval of funding affect our ability to deliver on our investment programme and in turn our net zero commitments. **Timeframe:** Short and medium-term **Impacted businesses:** ET, GT, US Regulated	Our ability to support the energy transition in the jurisdictions that we operate in is dependent on the funding approved by our regulators. We therefore work closely with our regulators and other stakeholders to develop investment plans in line with their net zero commitments while managing the costs to consumers. In the UK, we received a final package from Ofgem for RIIO-2 that will allow the critical investment required to maintain the resilience and reliability of our networks. We were also pleased to see greater flexibility in the mechanisms that will enable further investment required to deliver the energy transition; the suite of net zero and innovation mechanisms provides opportunity to access funding to develop net zero pathways. In the US, we filed for new rates for KEDNY and KEDLI in April 2019, for NMPC in July 2020 and our Massachusetts Gas companies in November 2020. Each case included proposals in support of the respective state's climate objectives, for example our KEDNY and KEDLI filing included a future of heat proposal, which featured expanded energy efficiency and demand response programmes, RNG interconnection investments, and a hydrogen blending study. Our NMPC filing included various investments linked to climate change and the new energy landscape, and in November 2020, the NYPSC approved NMPC's proposal for full deployment of Advanced Metering Infrastructure throughout its service territory which will enable clean energy initiatives and presents an opportunity to align policy goals like those set forth in the NY Climate Leadership and Community Protection Act. For the Massachusetts Gas companies, the rate case focused on both the regulatory frameworks and specific future of heat proposals to start the path of decarbonising our natural gas networks and the heating sector. Massachusetts Electric Company (MECO) will commence the third year of a five-year rate plan on 1 October 2021. The approved rate case order included several paths forward on the state's climate objectives including a climate change mitigation and adaptation plan, off-peak rebate programme for EV owners, approval of up to $50 million in energy storage, and a path forward for a significant investment in EV-charging infrastructure in 2021. In Rhode Island, the Narragansett Electric (and gas) Company (NECO) will continue operating under the third year of a three-year rate plan, and is anticipating the next rate case to be filed in November 2021. As part of the acquisition of WPD, we announced the sale of NECO to PPL which is expected to complete in early 2022.
Markets There is a risk that we are unable to deliver against our net zero targets in the UK and US, impacting our reputation, business model and in turn hindering others' ability to meet net zero targets. **Timeframe:** Short, medium and long-term **Impacted businesses:** Group-wide	The broader economy-wide net zero transition will impact our ability to meet our interim greenhouse gas (GHG) emission goals over the next 10 to 20 years; and equally our ability to rapidly deliver key infrastructure changes directly affects progress against net zero targets in the UK and US. Associated with this is a risk of failure to respond to shifts in societal and political expectations and perceptions of our role in decarbonising the economy and society. Facilitating the transition to a low-carbon economy is central to our purpose as a business and we are taking certain key actions in relation to decarbonisation. These include advocacy on legislative and policy changes that advance decarbonisation (for example the green recovery and a principal partner of COP26), campaigns targeted at relevant areas such as the future of heat and actions in the regions we operate in to accelerate decarbonisation for the public and our customers (for example, supporting renewable generation connections and investment in new and emerging areas).

Task Force on Climate-related Financial Disclosures (TCFD) continued

Risk/opportunity type and description	Our response
Markets Disruptive forces and changes in supply and demand for existing and new technologies may act as competition, require change of business model or services and/or present new opportunities. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	Achieving net zero will depend on new technologies and we are investing in our own transformational innovation capability such as in the UK, the Deeside Innovation Centre (Electricity) and FutureGrid Hydrogen Test Facility (Gas); diversifying our propositions and partners, and working with industry groups and partners to develop and upscale technology. In the US we are aggressively replacing leak-prone pipe in our gas infrastructure, which will reduce GHG emissions by 207 KT CO_2e per year by 2030. Additionally, we are pursuing various initiatives related to hydrogen and renewable natural gas, including the HyBlend initiative of the US Department of Energy that will address technical barriers of hydrogen blending into the gas network and a $50 million investment in the Newtown Creek (New York) renewable natural gas (RNG) project that will utilise wastewater and food waste for the production of RNG. As the transition to renewable generation continues, we will work with the Long Island Power Authority (LIPA) to transform our generation fleet by responding to future requests for proposal (RFPs). Under our existing contracts which extend through 2028, LIPA determines their reliability and sustainability needs and which units are operated, retired or transformed.
Security and reliability Changes to the supply and demand of energy impacts on how we deliver electricity grid and gas grid reliability and year-round operation. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** ESO and UK GT	With growth in renewables increasing intermittency on the network, and electrification of transport and heat likely, we are working with our stakeholders to ensure that grid reliability and operability is understood, managed and planned at appropriate levels. In the UK, the ESO Operability Strategy Reports outline the way in which this is being done, for example last year we launched a new superfast frequency response product called dynamic containment. This is a revolutionary step which will have profound consequences in network operation and is critical to facilitating a decarbonised grid. Further, to facilitate the ESO's ambition to be able to operate the system safely and securely at zero carbon whenever there is sufficient renewable generation online and available to meet the total national load, the ESO has agreed to contracts with five parties, worth £328 million over a six-year period, in a world-first approach to managing the stability of the electricity system. Also, our UK Gas transmission business is exploring a range of innovative technologies to investigate how the Gas Transmission network could enable the UK to achieve net zero at least cost and disruption to consumers. This includes investigating whether the NTS could be used to transport hydrogen to customers in the future. This continues to be integral to the future of the gas assets, to demonstrate how existing Gas Transmission assets can be repurposed for hydrogen and will continue after the sale of our UK Gas Transmission business.
Extreme weather Physical impacts from extreme weather events such as storms and flooding. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	We continue to address the physical risks from extreme weather-related events, with a focus on flooding events (in both the UK and US) and storm hardening (in the US). As this work continues, it will be informed by not only the weather patterns we are experiencing, but also the results of the ongoing scenario testing. By the end of RIIO-T1 we will have invested £113 million in flood defences with deferred works of a further £45 million for work to be completed early in RIIO-2 with a total investment in resilience on 52 sites. NGET's RIIO-2 (2021 – 2026) plans aim to protect up to a further 100 sites from surface-level flooding and recommend further investments to manage the risks posed from the secondary impacts of flooding, such as erosion and subsidence to our tower and cable routes.
Changing weather conditions Increased frequency of weather incidents and changing long-term trends leading to asset damage/compromise and operational risks. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	The scenario testing underway is examining trends across seasonal average temperature and precipitation, as well as sea level risk. The businesses will consider whether our design standards are still appropriate under different scenarios, for example, a wider temperature range.
Changing weather conditions Changes in supply of and demand for gas and electricity as a result of changing weather conditions. **Timeframe:** Short/Medium and Long-term **Impacted businesses:** Groupwide	The ESO is undertaking Mapping Impacts and Visualisation of Risks (MIVOR) of extreme weather on system operation to evaluate the impacts of extreme weather events on system operation up to 2050 under Representative Concentration Pathway (RCP) 4.5. The results will enhance the accuracy of energy system impact modelling and will also focus on the impacts of the whole supply chain, renewable generation, network assets, and demand, ensuring that the learnings produced are relevant to the whole energy system.

Impact of the climate-related risks and opportunities on our strategy

Climate change is the defining challenge of this generation and in our role at the heart of the energy system we understand the critical role we need to play. The markets in which we operate have announced ambitious carbon reduction targets and further legislative actions are anticipated. In response, in March 2021 we announced a strategic portfolio repositioning, announcing the acquisition of WPD, the largest electricity distribution network operator in the UK, the sale of NECO in the US and our intention to sell a majority stake in our UK Gas Transmission business. The acquisition of WPD provides a one-off opportunity to gain a scale position in the UK electricity distribution market, enabling National Grid to play a pivotal role in enabling the growing role of electricity in the energy landscape in the UK. Upon successful completion of the announced transactions, the contribution of electricity to National Grid's portfolio will be around 70% of the Group.

Across all of our businesses we aim to play a leading role in enabling and accelerating the transition to a clean energy system, balancing decarbonisation, affordability and reliability of supply. Working closely with governments and other stakeholders and partners around the world and through our work for COP26, we focus on the technical and commercial solutions that will help achieve net zero for the energy sector. While the biggest impact we can have is in enabling the economy-wide clean energy transition, we must also reduce our own direct impact on the environment and strengthen our resiliency to risks that we have less control over. To accomplish this, our RBC commitments to reduce Scope 1 (direct emissions from our operational activities), Scope 2 (indirect emissions from our purchase and use of gas and electricity) and Scope 3 (other indirect emissions from activities and sources outside of our ownership or control) emissions align with the requirements of the Paris Agreement and Science Based Targets initiative (SBTi). These commitments, along with our overall suite of environmental sustainability initiatives, are reviewed in accordance with our quarterly business reviews and reported accordingly to the Group Executive Committee and Board.

Our climate change scenario analysis

Transition Risk Analysis

To further understand the risk that climate change could have on our business, we undertook a high-level scenario analysis, where we considered scenarios out to 2030. We used two scenarios:

- The first assumed that the global response to the threat of climate change is enough to limit global average temperature increases to no more than 1.5ºC above pre-industrial levels (as set out in the Paris Agreement) by 2100 **(the 1.5ºC scenario)**. In this scenario, rapid changes are made to progress decarbonisation goals: coordinated policy, regulation and customer behaviour favours bans on polluting technologies, and support for low-carbon solutions. We have assumed that transition impacts in this scenario would be focused around technological shifts to support decarbonisation, with the main impacts being a trend towards more large-scale renewables in the generation mix, a trend towards electrification and public pressure against the use of gas.
- The second scenario assumed that the 1.5ºC target is missed by some margin, comparable to a 4ºC global average temperature increase **(the 4ºC scenario)**. In this scenario, changes are less rapid and less comprehensive, and emissions remain high, so that the physical ramifications of climate change are more apparent by 2030. In rationalising this slower global progress, our 4ºC scenario assumed fragmented and ad hoc policy (within the Group's operating territories and globally). The main impacts of this scenario were increased weather events of escalating severity and frequency, which could increase disruption to our assets and our customers, less coordinated policy and regulation in pursuit of decarbonisation, resulting in an increase in overall system costs and reduced visibility over the network and inequality of access where some decarbonisation activities have the potential to leave some sectors of society behind.

Our analysis showed that, without action, both scenarios presented risks to us. However, while these would need to be managed, some of these changes represent material opportunities. Our next refresh of our scenario analysis will reflect the developments in our strategy as well as advancements in technology and in the wider market.

Physical Risk Scenario Analysis

To further understand the risk that climate change could have on our business, we are undertaking a high-level assessment of the physical climate change risks to assets across our UK and US business under a 2°C and 4°C scenario at future time periods of the 2030s, 2040s, 2050s and 2070s. This is important in order to mirror the longevity of our assets, even if the levels of uncertainty can increase the further ahead in time you look. The exercise is not yet complete (the project start date was delayed due to the COVID-19 pandemic), and therefore only initial results and the approach are shared in this year's disclosure.

Our approach

Our analysis on physical climate risks is aligned with recognised climate scenarios, specifically the Intergovernmental Panel on Climate Change's (IPCC) Representative Concentration Pathway (RCP) scenarios which provide a uniform framework for exploring potential climate changes and related impacts. RCPs are used globally for climate modelling and give access to a wide range of peer-reviewed and accepted climate datasets, as well as allowing consistency across our UK and US territories. We prioritised climate data sources according to confidence and readiness for use to support a consistent risk assessment across our UK and US territories. We relied on the most up-to-date and robust data from recognised national or local sources such as UKCP18 and NCA4.

We have considered the full portfolio of assets across our businesses, grouped into 12 asset types to assess vulnerability to these hazards. An assessment of risk, along with indication of confidence, will be provided by the combination of climate hazard, asset vulnerability and asset exposure for each hazard (Figure 1). The hazard assessment is drawn from geospatial analysis of climate model data, which will be co-located with our assets within the full risk assessment during 2021.

Initial insights from the modelling

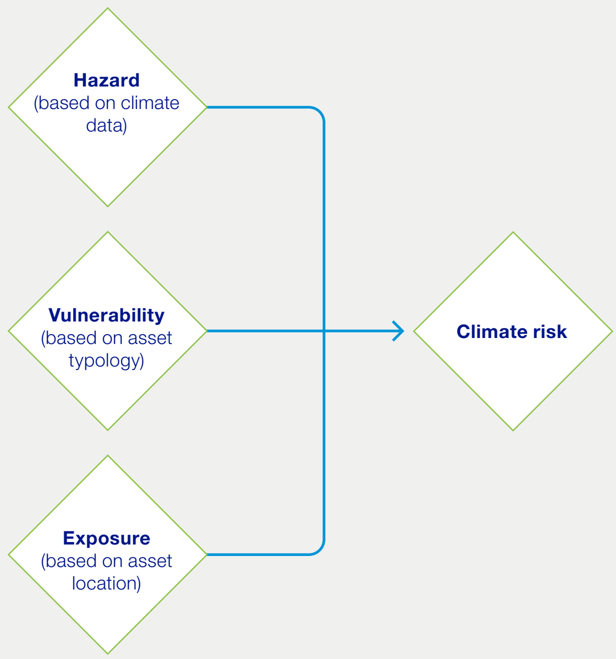
We identified eight priority climate hazards expected to have a material impact on our business, and so have focused on these hazards for this scenario analysis. Table 1 shows the climate indicators we use to represent each of the eight hazards, together with a high-level indication of the overall direction of change across the US and UK under a 4°C scenario.

Alongside the hazard assessment, our asset vulnerability assessment shows that:

- coastal and inland flooding remain the hazards which have potential to impact the widest range of asset types, depending on location.
- temperature-related hazards (very hot or very cold days, and rapid changes) can have significant impacts, but on a smaller range of asset types.
- generation assets have high vulnerability to both flood-related hazards and high temperatures.
- underground assets are protected from the direct impacts of some climate hazards (such as high winds, storms, lightning) but may experience indirect impacts such as erosion and ground movement.

Vulnerability to hazards does not mean that risks will be realised. Whether vulnerability translates into risk depends on the exposure (location) of individual assets relative to projected changes in climate hazards, as well as any site-specific resilience measures in place. The full quantified hazard and risk assessment is due later in 2021 and will provide insights through comparison of scenarios, timeframes and aggregation of results by asset type, territory or business. We are developing an interactive visualisation to allow each business to make more tailored use of the scenario analysis.

Figure 1 Components of climate risk assessment



A key feature of our approach to scenario analysis is ongoing engagement across the Group, with representatives of each National Grid business involved in prioritisation of hazards and vulnerability assessment. In turn, every business has a stake in the outcome and is identifying how the assessment will be used in strategic planning and investment choices. This is supported by an action on our principal climate change risks to develop a climate change adaptation strategy/action plan.

Task Force on Climate-related Financial Disclosures (TCFD) continued

Table 1 Summary of climate hazard assessment

Climate hazard	Indicator	Potential change by 2070s (4°C scenario)	Level of confidence in assessment
Coastal flooding	Extent of flooding for various return period events (e.g. 1-in-30, 1-in-100, 1-in-1000)	Considerable increase in frequency and/or magnitude	Moderate
Inland flooding	Extent of flooding for various return period events (e.g. 1-in-30, 1-in-100, 1-in-1000)	Considerable increase in frequency and/or magnitude	Moderate
Storm	Combinations of high wind speed and precipitation: frequency of days when wind speed above threshold value (e.g. 55 mph) and rainfall daily amount also above threshold value (e.g. 25 mm/day)	Slight increase in frequency and/or magnitude	Low
High wind speeds	Frequency of days with wind speed above threshold value (e.g. 76 mph (34 m/s))	May increase or decrease	Low
Lightning	Frequency of lightning occurrence (qualitative)	Slight increase in frequency and/or magnitude	Low
Increased extreme temperatures	Frequency of days with maximum temperature above 35°C (95°F)	Considerable increase in frequency and/or magnitude	High
Low temperatures (icing)	Frequency of days with maximum temperature below 0°C (32°F)	Slight decrease in frequency and/or magnitude	High
Freeze-thaw cycles	Frequency of days with minimum temperature below 0°C (32°F) and maximum temperature above 0°C (in the same day)	May increase or decrease	Moderate

Risk management of climate-related risks

Process for identifying and managing climate-related risks

In autumn 2019, a Group-level climate change principal risk was developed and added to our Group risk register. The climate change principal risk is underpinned by our enterprise risk management process which is the framework through which the Group identifies, assesses, prioritises, manages, monitors and reports risks. This process, which is described on page 24 of the ARA, includes the identification of a series of Group-wide controls and actions to mitigate the climate change principal risk (this is further described on page 26).

The controls for our climate change principal risk have evolved in line with our strategy and regulatory frameworks and all are in progress. They include controls on governance (for example, Board and Group Executive Committee sign-off on strategy and oversight of delivery against net zero action plans), investment plans (bringing to scale new technologies), leadership and climate adaptation. Controls related to the climate change risk are also reflected throughout other relevant risks, for example disruptive forces, regulatory outcomes, political and societal expectations. Progress has continued against specific UK and US business risks on climate change as well as US risks embedded in climate change threats that support the Group risks. The Secretary of State in the UK requires our UK Electricity Transmission and UK Gas Transmission businesses to report on what we are doing to adapt to climate change. Our most up-to-date report will be published in 2021. This covers a much wider qualitative assessment of potential risks.

Metrics and targets

We have metrics and targets that allow us to measure our impact on the environment, demonstrate our commitment and monitor our performance. These were published in October 2020 within our RBC and, on an annual basis, our RBR will report our progress against those targets. As previously discussed, the cornerstone of our suite of metrics is our commitment to reducing our impact by achieving net zero for our Scope 1 and 2 emissions by 2050, with interim targets of an 80% reduction by 2030 and a 90% reduction by 2040. Numerous underlying metrics support and complement this goal as part of our broader sustainability ambition, including reducing the carbon footprint of our operating facilities, enhancing the natural value of our properties, recycling and/or reusing our recovered assets and reducing our office waste. These are discussed in more detail on pages 56 – 58 and in our RBR. The metrics are comprised of several business unit level metrics that are then tracked and monitored by business unit, and presented to senior management on a quarterly basis, with accountability at the local level.

We continually review our metrics and targets, as needed, to ensure that the data we are measuring is meaningful, aligns with our strategy, and is providing the information the business and our stakeholders need to effectively monitor our performance and demonstrate our progress. In 2021/22, we will be laying out our pathway to achieve our net zero by 2050 emission reductions. Our GHG emissions reduction targets have been approved by the SBTi criteria, including a more ambitious Scope 3 emissions reduction target of a 37.5% reduction by FY 2034 from a FY 2019 baseline year.

We have also included enhanced disclosures in the financial statements prepared under IFRS to explain how we have considered the financial impacts of climate change, in particular evaluating the impact of new net zero commitments in our territories, and the effect this has had on judgements and estimates such as the useful economic life of our gas assets. See notes 1 and 13 to the financial statements for details. This remains a recurring area of focus for the Audit Committee.