

A female worker in an orange high-visibility uniform and safety gear is working on a large industrial machine. She is wearing a white hard hat with the 'nationalgrid' logo, safety glasses, and grey gloves. She is holding a metal hose or cable. The background is a blurred industrial setting.

nationalgrid

# Delivering the energy transition now

Annual Report and  
Accounts 2023/24





Small text: 100% Electric Vehicle  
**We're driven  
by cleaner  
energy**

nationalgrid

nationalgrid

BF22 EXV

# Highlights

## Group financial highlights

Statutory earnings per share (EPS) (p)

# 60.0p



Underlying EPS (p)\*

# 78.0p



Group Return on Equity (RoE) (%)

# 8.9%



\* Prior year comparatives have been restated to reflect the change in our underlying earnings definition to remove the deferred tax in UK regulated businesses (UK ET and UK ED).

## Group operational highlights

Group safety performance

(lost time injuries (LTIs) per 100,000 hours worked in 12-month period)

# 0.08



Scope 1 and 2 greenhouse gas emissions\*\*

(CO<sub>2</sub> equivalent, million tonnes)

# 6.9



Employee engagement (%)

# 81%



\*\* In setting our new near-term Science Based Targets initiative (SBTi) approved targets, we follow the WRI/WBCSD GHG Protocol guidance and recalculated our new baseline (2018/19), aligning with our Recalculation Policy. This includes recalculating 2022/23 and 2021/22 comparative figures to reflect improved calculation methodology.

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## Further reading

### Online report

The PDF of our Annual Report and Accounts 2023/24 includes a full search facility. You can find the document by visiting:



[nationalgrid.com/investors/resources](https://nationalgrid.com/investors/resources)

### Responsible business

National Grid annually publishes its Responsible Business Report (RBR), which reports progress on the responsible business agenda, including towards the commitments made in the Responsible Business Charter (RBC). The RBR will be published in due course. You can find both documents by visiting:



[nationalgrid.com/responsibility](https://nationalgrid.com/responsibility)

### 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 2023/24 was \$1.26 to £1 (2022/23: \$1.22 to £1).



### Further reading

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



### Alternative performance measure

In addition to International Financial Reporting Standards (IFRS) figures, management also uses a number of alternative measures to assess performance. Definitions and reconciliations to statutory financial information can be found on pages 242 – 256. These measures are highlighted with the symbol above.



### PwC Assured Data

Denotes information subject to limited assurance by PricewaterhouseCoopers LLP (see page 19 for full definition).

### Cover image

An overhead lines person working on electricity transmission infrastructure in the UK.



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



# National Grid at a glance

## Our vision

is to be at the heart of a **clean, fair and affordable energy future.**

Our purpose is to



## Our values

Do the right thing

Stand up for safety every day

Put our customers first

Be inclusive, supporting and caring for each other

Speak up, challenge and act where something doesn't feel right

Find a better way

Take personal ownership for delivering results

Be bold and act with passion and purpose

Focus on progress over perfection

Follow the problem through to the end

Make it happen

Embrace the power and opportunity of diversity

Increase efficiency to help with customer affordability

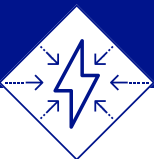
Work with others to find solutions for customers

Commit to learning and new ideas

## Where and how we are active in the energy value stream

### Generation

Generation is the production of electricity from fossil fuel and nuclear power stations, as well as from renewable sources such as wind and solar.



6

### Transmission

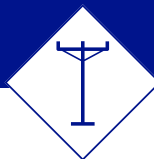
Transmission networks transport energy over long distances at high voltage (in the case of electricity) and high pressure (in the case of gas) safely and efficiently from where it is produced, and onward to the distribution networks.



1 3 4 5 6

### Distribution

Distribution networks take high-voltage electricity and high-pressure gas from the transmission networks, and deliver it at lower voltages and reduced pressures to homes and businesses, such that it can be used by consumers.



2 3 4 5

### Supply

Supply of electricity and gas involves buying and selling it on to customers as well as customer services, billing and the collection of customer accounts. End-users include industrial, commercial and residential consumers.



3 4 5



## Where we operate

### United Kingdom

Our core, regulated businesses focus on electricity transmission and distribution. We also balance national energy supply and demand as the system operator in Great Britain (GB). In the second half of calendar year 2024, this part of our business is expected to separate from the Group to form the core of the National Energy System Operator (NESO).

#### UK principal offices

**Owned office space:** Bristol, Cardiff, Castle Donnington, Plymouth, Warwick and Wokingham<sup>1</sup>.

**Leased office space:** London

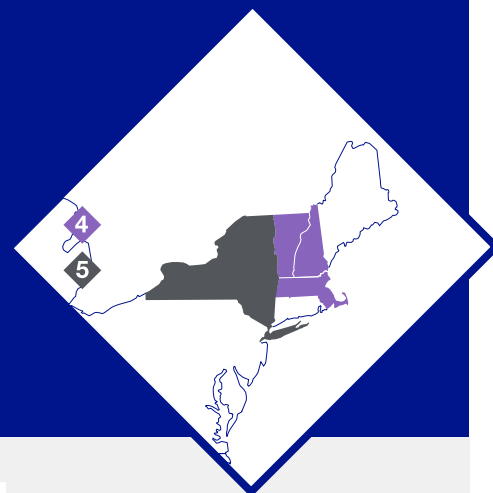
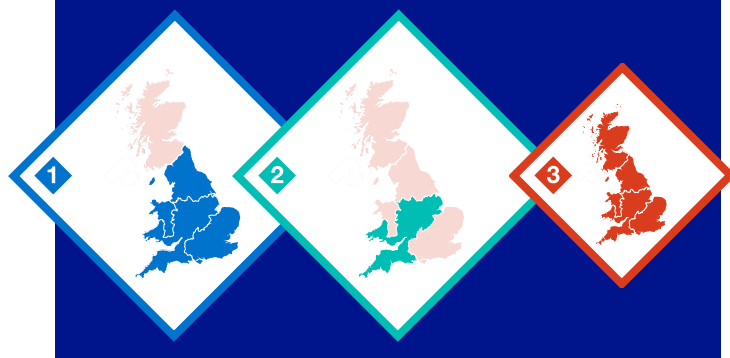
### North America

Our core, regulated businesses focus on transmission, distribution and retail of gas and electricity.

#### US principal offices

**Owned office space:** Syracuse, Buffalo and Melville in New York. Northborough in Massachusetts.

**Leased office space:** Waltham and Boston in Massachusetts. Brooklyn in New York.



## Our business units

### 1 UK Electricity Transmission (UK ET)

We own and operate the high-voltage electricity transmission (ET) network in England and Wales.

The Strategic Infrastructure (SI) business unit was established on 1 April 2023 to deliver major UK ET infrastructure projects through the Accelerated Strategic Transmission Investment (ASTI) framework.

### 2 UK Electricity Distribution (UK ED)

We own and operate the electricity distribution networks for the East Midlands, West Midlands, the South West and South Wales. The UK ED business includes a Distribution System Operator (DSO) which is overseen by an independent panel.

### 3 UK Electricity System Operator (ESO)

We currently operate as the electricity system operator across GB. Upon separation, this will form the core of NESO.

### 6 National Grid Ventures (NGV)

NGV's portfolio includes six electricity interconnectors between the UK and Europe, liquefied natural gas (LNG) import, storage and regasification, contracted thermal generation and Federal Energy Regulatory Commission (FERC) regulated transmission in the US.

As part of evolving our strategy to focus on networks and streamlining our business on 23 May 2024, we will be announcing the sale of Grain LNG, our UK LNG business, and National Grid Renewables, our US onshore renewables business.

### 7 Other activities

Other activities primarily relate to National Grid Partners, the venture capital investment and innovation arm of National Grid, as well as UK property, insurance and corporate activities.

### 4 New England (NE)

We own and operate electricity transmission networks in Massachusetts, New Hampshire and Vermont. In Massachusetts, we also own and operate electricity and gas distribution networks.

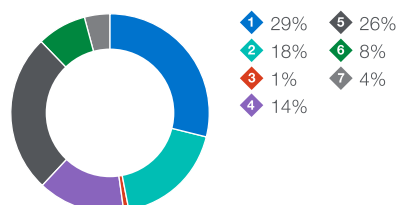
### 5 New York (NY)

We own and operate gas and electricity transmission and distribution networks across upstate New York. We also own and operate gas distribution networks in New York City and on Long Island. We act as a regulated supplier to approximately 4.2 million residential and commercial customers across gas and electricity.

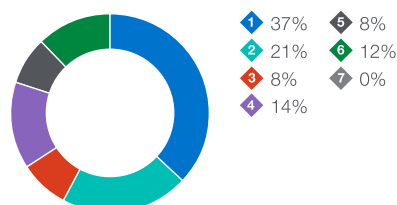
Further reading pages 32 – 36

1. Ownership of the Wokingham site will move with NESO.

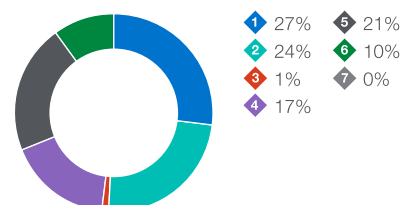
## Regulatory asset value (RAV), rate base and other assets (%)



## Statutory operating profit (%)



## Underlying operating profit (%)



# Our business model

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

## Our resources and relationships

### Internal resources

#### Physical assets

Our electricity and gas networks are built to last for many decades and account for most of our asset base, which we continue to invest in. In the US, we also own large-scale renewables.

#### Funding

We fund our business through a combination of shareholders' equity and debt. We maintain an appropriate mix of the two and manage financial risks prudently.

#### Colleagues

We are immensely proud of our people, who represent the diverse communities we serve. Together, we have spent decades installing and managing critical energy infrastructure, forging crucial relationships and building a culture of ambitious, diligent and compassionate service.

#### Strong relationships

Our business relies on strong relationships with our stakeholders. These include the following:

**Our customers**, who depend on us to connect them to the energy they use and who (through a portion of their energy bills) pay to use our networks. These also include (in our transmission businesses) the electricity generators and gas suppliers who own the energy that flows through our cables and gas pipes.

**Our contractors and suppliers**, who have complementary experience, skills and resources, and with whom we agree mutually beneficial contractual arrangements and, wherever possible, take advantage of economies of scale and use sustainable and global sourcing opportunities.

**National and regional governments and local communities**, with whom we work to deliver networks that meet local and national needs.

The **regulators and agencies** who set the prices we can charge and amounts we can invest for providing an economic, efficient and non-discriminatory service as well as health, safety and environmental standards.

## What we do



### Transmission

Our transmission networks deliver electricity to homes and commercial properties via distribution networks, and directly to industrial properties. We also facilitate the connection of generation assets to the transmission system.



### System operation

We ensure that supply and demand are balanced in real time across GB electricity transmission (ESO) and in our distribution licence areas (DSO). In the US, we are the DSO, but Independent System Operators are responsible for transmission.



### Distribution and supply

In the UK and US, we deliver natural gas and electricity safely and reliably to millions of consumers connected to our distribution networks. In the US, we act as an energy supplier for many of our customers. Where they choose to buy electricity or gas from third parties, they pay us for distribution only.



### Renewables

We are working with our partners to accelerate the development of a clean energy future. In the US, we have made significant investments in large-scale renewable energy projects, including wind and solar. In the UK, we are not permitted to own generation assets.



### Electricity interconnection

Interconnectors are high-voltage cables used to connect the electricity systems of neighbouring countries. They allow capacity holders and system operators to trade excess power and balance supply and demand to maintain security of supply.

We have interconnectors linking GB to France, Belgium, Norway, the Netherlands and Denmark.



### Storage

In the US, we own and operate battery storage assets. This includes full scale systems in our regulated Massachusetts business and via NGV, as well as demonstration projects in our regulated businesses in both Massachusetts and New York. In the UK, our transmission license prevents us from owning electricity storage. We own and operate Grain LNG import terminal, one of only three terminals in the UK and one of the largest in Europe. Our world-class facility plays an important role in ensuring secure energy supply in the UK. We also own LNG storage and liquefaction facilities in the US.



### Generation

In the US, we own and operate electricity generation facilities on Long Island. Also on Long Island, we operate modern solar and battery storage projects with NextEra Energy Resources.

## Why it matters

### Financial strength

By managing our operations safely and efficiently for the long term, we generate substantial cash flows. Coupled with long-term debt financing, this enables us to invest in growing our asset base and fund our dividend.

### Efficient investment and lower capital costs

Efficient investment in our networks will deliver strong and sustainable growth in our regulated asset base over the long term. Innovation and flexibility reduce the amount of network reinforcement that is needed to deliver the capacity required for net zero.

### Shareholder returns

Going forward, and following the rebasing of the 2023/24 dividend per share (DPS) following the Rights Issue, the Board will aim to grow annual DPS in line with UK CPIH, thus maintaining the DPS in real terms. The Board will review this policy regularly, taking into account a range of factors including expected business performance and regulatory developments.

### Doing the right thing

Beyond the financial benefits for our Company and shareholders, all of us at National Grid are driven by a common vision to make our energy systems as clean, fair, affordable and safe as possible.



Full-year dividend on **page 6**



Further reading on our stakeholders **pages 42 – 43**

## How we create value

### Our technical expertise

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

Our expertise includes the following:

#### Engineering and asset management

We invest in and maintain our assets across their life as safely, efficiently, reliably and sustainably as possible.

#### Safe Operations

We aim to provide excellent service to all our customers. We operate safely and reliably, restoring power quickly after outages.

#### Capital project 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 substantial standalone projects.

#### Modelling and forecasting

We have developed in-house modelling capability in the US and the UK to conduct scenario-based analysis to inform business planning and thought leadership as well as providing peer-review to planners elsewhere in the industry.

#### Innovation

We are developing new technologies and innovations, both within our own businesses and through investment in external emerging technology companies, to optimise efficiency and help deliver net zero.



Further reading on our strategy on **pages 16 – 17**  
 Internal control and risk management on **pages 22 – 23**  
 Our commitment to being a responsible business on **pages 37 – 41**  
 How the Board monitors culture on **page 84**

### Our culture and values

Every day we strive to do the right thing, find a better way, and make it happen. Safety is our highest priority for our employees and the public.

We maintain high standards of ethical business. We also promote behaviours aligned with our values by providing an internal helpline for raising concerns, acting on feedback from our employee survey and recognising our employees through a Group-wide appreciation system, which was refreshed this year. This recognises both what they achieve and how they have achieved it.

### Strategy and risk management

As the energy industry continues its transition to a cleaner future, our strategy articulates our priorities clearly, while positioning our business to bring long-term economic benefits into the regions where we operate. We regularly review our strategy and update our priorities accordingly.

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

## The value we create



### Customers

We enable the delivery of safe, reliable, resilient and affordable energy to customers in the communities we serve. We do this through operational excellence and financial discipline, keeping bills fair and affordable for our customers.



### Investors

We aim to be a low-risk, dependable investment proposition, focused on generating shareholder value through dividends and asset growth. We deliver essential assets under primarily regulated market conditions and service long-term, sustainable consumer-led demands.



### Colleagues

We aim to create a diverse, equitable and inclusive environment where our colleagues can make a positive contribution, develop their careers and reach their full potential.



### Suppliers and contractors

We maintain responsible and efficient supply chains, develop new suppliers and align our interests with those of our suppliers and 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.



### Regulators

We aim to build trust with our regulators through constructive, transparent engagement and by striving to consistently deliver our commitments to a high standard.

## Why it matters

### Clean energy future

In addition to our own commitment to reduce our greenhouse gas (GHG) emissions to net zero by 2050, we are working with governments and regulators to help them meet their carbon reduction targets and deliver the energy transition.

### Fairness and affordability

The transition to clean energy should be affordable for all, and we will play our role in ensuring no one is left behind, helping the places where we operate reach their emissions targets.

### Job creation

We are providing employment opportunities and supporting our colleagues in developing the skills necessary to build a net zero energy system. In 2023/24, the direct and indirect economic impact of our activity supported 201,000 jobs in our regions.

### Tax contribution and economic impact

We recognise that our tax contribution supports public services and the wider economy, and we endeavour to pay the right amount of tax, at the right time, in accordance with relevant tax laws. The direct and indirect impact of our activities in 2023/24 helped to generate £3.6 billion in tax receipts across the UK and US.



# Chair's statement

**We're translating policy support into full-scale construction programmes that create jobs, uplift communities, and ensure that the energy systems will be sufficiently flexible and resilient for the future.**



## Dear Fellow Shareholder,

Economies across the globe are focused on the critical need to invest in infrastructure. The motivations for doing so may differ – some are propelled by the need to address climate change through decarbonisation; others wish to use investment to jumpstart their economies; for others it's about being able to provide for future manufacturing and technology capability to maintain their edge. Global geopolitics and territorial security, including energy security, have moved up the hierarchy of priorities for virtually every country.

While the motivations may differ, the exigency is the same – to build for the future, to build at pace, and to build now.

National Grid is well positioned against this backdrop. The policymakers in the regions in which we do business – the UK and the US – are of one mind on the urgency of investing

in energy infrastructure, particularly electricity transmission and distribution. It's now up to us to translate this policy support into full-scale construction programmes that create jobs, uplift communities, and ensure that the energy systems will be sufficiently flexible and resilient for the future.

Over the next six years, we anticipate that National Grid will commission vastly more new and upgraded infrastructure than it has in the previous 30 years. To give a sense of scale with just one example, our UK Strategic Infrastructure business unit will be installing over 7,456 miles (12,000 kilometres) of new cables across 17 new projects (including onshore and offshore conductor cables). That's equivalent to the diameter of planet Earth.

Mobilising the global supply chain on behalf of our customers and navigating the complexity of planning and permitting are twin challenges – but the Board feels confident that our organisation is up to the demands that such a significant programme will bring.

Alongside our financial results, National Grid announced a significant increase in investment that cements our position as a leader in the energy transition on both sides of the Atlantic, as well as a fully underwritten equity raise of £7 billion through a Rights Issue,

which provides shareholders with the pre-emptive opportunity to fund and benefit from our higher growth strategy.

None of this would be possible without people. Often in this Chair's letter, I express appreciation to our people for what they do. This year is no exception. But it seems appropriate to widen the expression of gratitude to include our alliance partners who are working with us in new ways, our regulators who are setting supportive frameworks under which we can make these investments, the technologists who are inventing the future as we modernise our infrastructure, and the many communities and stakeholders who are on this journey with us.

But this vision of reconfiguring the energy system is only possible if investors support our programme. On behalf of the Board and our organisation, we thank you, our shareholders, for your continued support of the Company.

*Paula Rospot Reynolds*

**Paula Rospot Reynolds**  
Chair

## Final dividend of

# 39.12p

per share proposed to be paid on 19 July 2024

## Full-year dividend (pence per share)

2023/24	58.52
2022/23	55.44
2021/22	50.97
2020/21	49.16
2019/20	48.57

The 2024 Annual General Meeting (AGM) of National Grid plc will be held as a hybrid event at 11.00am on Wednesday 10 July 2024. More details on the arrangements for this year's AGM, including how to attend virtually, can be found at: [nationalgrid.com/investors](https://nationalgrid.com/investors)



# Chief Executive's review



**We have moved firmly into a new phase of capital delivery, with more than £30 billion of investment over the past five years, and we see unprecedented levels of growth ahead.**

## Context in which we are operating

Over the past 12 months, National Grid has maintained focus on delivering for our customers and for you, our shareholders, against a complex landscape of macroeconomic and geopolitical challenges. High inflation and the ongoing cost-of-living crisis continue to be felt in both countries in which we operate, while geopolitical tensions across the world have continued to highlight the importance of energy security and affordability.

It is a privilege to enable the provision of energy to regions that, collectively, generate around £16.8 trillion of economic activity, and to be trusted to build the infrastructure today that will serve our customers' needs tomorrow and for decades to come. What we do counts, and we never take it for granted.

From the completion of the tunnelling at London Power Tunnels to the commissioning of the longest subsea High-Voltage Direct Current (HVDC) cable in the world, to the energisation of the New York Energy Solution transmission project, we have delivered projects which will change the energy landscape for years to come. Each one of these, and the many other projects we have in flight, will contribute to reducing consumer bills in the long term, enhance the energy security and resilience of the countries where we operate, and enable the decarbonisation of their respective economies.

There is, of course, an element of short-term uncertainty, with potential political change on the horizon in both the US and the UK. But our deep engagement with our key stakeholders is starting to pay off. The vital role of energy networks in achieving net zero has been recognised, and we have seen an increased focus by policymakers and regulators to remove the blockers to the energy transition.

The need for a strategic spatial energy plan – a strategic and holistic approach towards deciding what energy infrastructure the UK needs, and therefore what needs to be built, where and when – is widely recognised; we've seen thinking start to progress on planning processes for nationally significant projects, and the start of a reformed approach to connect projects to the grid more efficiently and effectively.

In the US, we have seen a major programme of infrastructure investment authorised in New York; in Massachusetts, there are ongoing proceedings where serious consideration is being given to grid modernisation and the future role of natural gas, with recognition that the two grids are interrelated in assuring the resiliency of the Northeast US.

## Business highlights

We care passionately about connecting projects to the grid as fast as possible and have connected more than 3 GW in the UK in the 12-month period, including Dogger Bank, the world's largest wind farm, and Viking Link, our interconnector with Denmark, which is the longest land and subsea cable in the world. Based on industry modelling, there is already more than enough capacity in the connections pipeline to meet the UK's net zero target. But the connections pipeline continues to grow every month, with many projects unlikely to be developed.

That is why we have been pushing hard for the fundamental reforms that are needed to enable us to connect clean energy projects faster. The Connections Action Plan made a good start, and proposals such as removing stalled projects from the connections pipeline and raising entry requirements for new projects looking to connect were a welcome step. We are continuing to work closely with the government and the regulator to achieve the further reforms necessary.

We have continued to deliver record levels of capital expenditure across National Grid, and this is set to increase still further, as we look to deliver The Great Grid Upgrade – the 12 onshore and 5 offshore projects which Ofgem awarded us in December 2022 under the Accelerated Strategic Transmission Investment (ASTI) framework.



Further reading: Our business units  
pages 32 – 36

That's why we set up our Strategic Infrastructure business unit in April 2023, which now comprises 374 people focused on capital delivery. We've made significant progress during the year, with our Yorkshire GREEN project receiving planning consent from the Secretary of State to begin construction this year, and our Eastern Green Link 1 and 2 joint construction projects are also due to begin in the coming year.

We are very mindful of the critical role that local communities play in hosting net zero infrastructure. We are deeply committed to engaging and consulting on our projects but, more than that, to ensuring that local communities are appropriately recognised for the role they play in delivering the energy transition for the benefit of all, and were pleased to respond to the UK government's community benefits framework consultation.

To support the delivery of these vital infrastructure projects at pace, we've also transformed our procurement processes and are collaborating more closely than ever with our supply chain. We've established a £59 billion HVDC cable framework and Enterprise Delivery Model – the Great Grid Partnership – to give us faster access to our supply chain in a constrained market.

In the US, in conjunction with partners New York Transco and the New York Power Authority, we are constructing Propel NY, a project to remove bottlenecks from the New York high-voltage grid. We are also undertaking the Upstate Upgrade, an approximate \$4 billion investment of at least 70 transmission enhancement projects, which we will deliver over the next six years to support a more resilient energy network in upstate New York and help reach the state's climate goals.

We also remain committed, with the support of our state regulators, to replacing aged gas pipelines, thereby assuring safety, reliability and a material reduction in methane emissions.

### Increased demand on the Grid

Artificial Intelligence (AI) and advanced computing are putting significant demands on power systems. This is a development we have been tracking for some time, along with other new demands on the horizon for energy-intensive industries such as giga factories, data centres and biopharmaceuticals. These demands are challenging the independent system planners in the UK and the US to revise their forecasts and plans for new generation.

Ensuring our transmission is in the right place at the right time is an essential element to meeting these future demands, and our projects and plans are well aligned with the Grid's wider requirements.

Nevertheless, as an industry, utilities are having to refresh some of our assumptions on demand growth. In the UK, the ESO has used demand response programmes to balance supply and demand, mostly due to the variability of wind and solar resources. There is potential for greater use of such programmes, and we expect that we will deploy them in the US as more smart meters are installed to enable the response to be calibrated.

However, growing demand – particularly at the times of system peak – makes the interplay between the electricity grid and the natural gas network an area of particular focus.

In Massachusetts, which is subject to extreme winter weather and limitations on imports of both gas and electricity, we have signed a 6-year contract with Everett LNG import terminal to ensure the resilience of the energy system in Massachusetts. This contract fills a deficit in our peak day portfolio, where the simultaneous demands on the gas and electricity systems on the coldest winter days create a reliability risk.

We continue to embrace other opportunities to decarbonise while preserving, first and foremost, the reliability of our service to customers.

### Regulation

We are deeply engaged with our regulators on rate cases in the US and price controls in the UK, to help evolve regulatory frameworks for the future that reflect the right balance of risk, returns and incentives, thereby delivering for customers, stakeholders and investors.

Our UK ED business is in the first year of its five-year RIIO-ED2 regulatory framework, and is on track to deliver its £7.5 billion investment programme.

In our UK ET business, we will be preparing our final submission to Ofgem in the year ahead for the RIIO-T3 price control which will be in place from 2026 to 2031.

In the US, we submitted our Electric Sector Modernization Plan (ESMP) to the Massachusetts Department of Public Utilities (MADPU) in January, outlining our plans and commitment to delivering a clean, fair and affordable energy future for all our customers while meeting the goals set out in the state's 2050 Clean Energy and Climate Plan. We are also progressing the rate filing for Massachusetts Electric Company (MECO), which we filed in November 2023. And in New York, we have filed for a joint proposal for KEDNY and KEDLI and remain on track to file for new rates for Niagara Mohawk (NIMO) before summer this calendar year.



## Capital delivery

So, as you can see, we have moved firmly into a new phase of capital delivery, with more than £30 billion of investment over the past five years, and we see unprecedented levels of growth ahead.

We now have increased clarity about the scale of investment ahead of us, the profile of that spend, and the financial frameworks that will sit around it.

That's why we expect to nearly double our investment to £60 billion in the next five years as set out in the new five-year financial framework to March 2029, which we announced alongside our Full Year results.

This level of investment in infrastructure in the UK, New York and New England will unlock significant economic growth and green job creation in the territories in which we operate, as well as driving forward the energy transition at pace to decrease consumer bills in the long-term and bolster energy security.

Alongside this significant increase in our investment programme, we announced a comprehensive financing plan, which includes an equity raise of £7 billion, through a Rights Issue of 7 new shares for every 24 existing shares. Alongside our new five-year financial framework, we are also further evolving our strategy to focus on networks and will therefore be streamlining our business and announcing the sale of Grain LNG, our UK LNG asset, and National Grid Renewables, our US onshore renewables business.

This refreshed strategy, new investment and funding plan will mean nearly 80% of our assets will be electric by 2029, and we will remain broadly evenly split between the UK and US, delivering an attractive growth and yield proposition. This investment will deliver annual Group asset growth of around 10% with our Group asset base heading towards £100 billion by 2029.

National Grid is ready to take full advantage of the significant opportunities that lie ahead.

## Doing the right thing

As a Group, our near-term emissions reduction targets are now aligned to the 1.5° pathway, as verified by the Science Based Targets initiative (SBTi) and we have updated our Climate Transition Plan to reflect this.

We are also innovating with new flexibility products for customers in our Electricity Distribution business, which has maintained its position as the largest flexibility provider in Great Britain. The innovative heat pump flexibility trial – EQUINOX – which we introduced over the past year, now has more than 1,000 customers enrolled.

I continue to be very proud of our exceptional record on storm response, and the colleagues who work under the most challenging of circumstances to deliver for our customers. Our emergency storm response and subsequent restoration of electric service during multiple severe weather events in Massachusetts during the period was recognised by the Edison Electric Institute with two Emergency Recovery and Response awards.

Tragically, we have reported three fatalities during the year, and these losses have been felt very deeply right across our business.

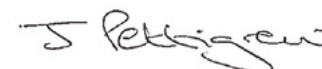
In August 2023, a colleague from our UK ED business died following a fall from height during overhead line work. Following our internal investigation into the incident, we have reinforced measures across our operations to help prevent such tragedies.

In December 2023, we lost a colleague and a police officer in Waltham, Massachusetts, both of whom were fatally injured by a vehicle while on duty. The vehicle was driven by a member of the public, who was apprehended, with legal proceedings currently under way.

We work in a business with inherent dangers, but our goal is to eliminate all preventable accidents and I remain personally committed to ensuring we are relentless in our drive to do so.

## Looking ahead

I am hugely grateful to my colleagues right across the business, whose talent, skills and dedication to deliver against our purpose shine through every single day. As I look to the future, the growth opportunities for National Grid are unprecedented. I am confident that we have the right portfolio, capabilities, funding and the best talent to deliver on the opportunities ahead. National Grid is driving the next phase of the energy transition today.



**John Pettigrew**  
Chief Executive



# Evolving our strategy

**Our vision is to be at the heart of a clean, fair and affordable energy future. Our strategic priorities set out what we need to do to deliver that vision. For the 2024/25 financial year, we have refreshed our strategic priorities to reflect changes in the external environment and to better prepare us for the future.**

Enabling the energy transition for all remains one of our strategic priorities. This will need much larger and smarter networks with the electrification of heat and transport. So, we have a new strategic priority to build the networks of the future now. Delivering for our customers remains a strategic priority. We have maintained the need to drive efficiency but given equal prominence to the need to operate safely. Our final objective recognises the growth in our workforce and the capabilities they will need to help us deliver these priorities.

We are deploying these through our organisation and using them to shape individual and team objectives for the year ahead. Reporting and reflections in this document are against the four priorities we had in place for 2023/24.

## Explaining our updated strategic priorities

These refreshed priorities are key to delivering our vision for a clean, fair and affordable energy future and came into effect in April 2024 in readiness for 2024/25.

Enable  
the **energy**  
transition  
for all

**We have a pivotal role in enabling the energy transition across all sectors of the economy through our networks. We work with policymakers, regulators and the wider industry to shape policy and regulatory frameworks needed to reach net zero by 2050.**

Build the  
**networks of**  
the future  
now

**We will scale a once-in-a-generation increase in capacity to connect to, and transport electricity across, our networks. We will modernise our electricity networks to improve capacity, visibility, security and reliability.**

**We will deliver a sustainable transition for our US gas networks.**

Deliver  
for our  
**customers**

**We will provide excellent service to all our customers, ensuring they can connect to the network in a timely fashion, that their energy provision is reliable and that we are easy to do business with.**

Operate  
**safely and**  
efficiently

**Our priority is to keep our colleagues safe. Being efficient means we play our part in making the energy transition affordable by investing in the right projects and solutions, and delivering them on (or ahead of) time and budget.**

Build  
**tomorrow's**  
workforce  
today

**All of this is enabled by our people. The energy transition is happening right now, so we need to build tomorrow's workforce today, with the diverse talent and skills needed to deliver our vision. Our ambition is to be the employer of choice for people who want to have a career in a company where they can have a clear and positive impact on the energy transition.**

Enable  
the **energy  
transition**  
for all

Build  
**tomorrow's  
workforce**  
today

Deliver  
for our  
**customers**

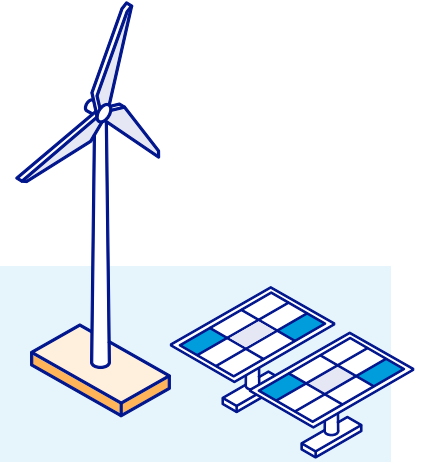
Build the  
**networks of  
the future**  
now

Operate  
**safely and  
efficiently**

# Our business environment

**We are committed to delivering net zero while ensuring fairness and affordability for customers. Through our work with governments and regulators, we're delivering infrastructure investments and shaping policy to realise climate goals.**

**In response to the changing business environment, we have refreshed our strategic priorities and the transformation activities which underpin them.**



## Net zero

### 2025

**The International Energy Agency expects global energy-related CO<sub>2</sub> emissions to reach their peak next year, before beginning to decline**

**Decarbonisation in the US Northeast and UK is the dominant driver of change and growth for our portfolio, and National Grid is committed to delivering the energy systems which are critical to the wider energy transition.**

#### Impact on our industry

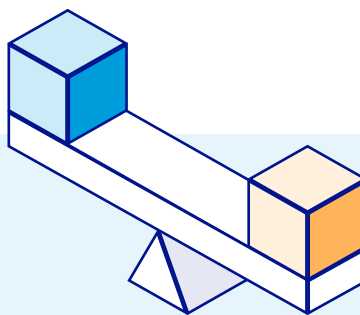
- Global momentum behind decarbonisation continues to build, but challenges on policy and emissions targets, as well as affordability remain.
- The UK government is prioritising reforms that reduce barriers to electricity infrastructure investment to deliver the net zero transition – including connections reform – and commitment to offshore wind remains strong. Despite challenges, even in our most pessimistic scenarios, we expect significant electricity network infrastructure upgrades.
- Across the UK, New England and New York, we expect electrification of heat and transport to increase electricity demand from around 569 TWh today to between 778 TWh and 861 TWh in 2035.
- In the US, renewable energy capacity could almost triple by 2032 to 110 gigawatts (GW) as the Inflation Reduction Act and Infrastructure Investment and Jobs Act support nationwide investment in the sector. New York, Massachusetts, Vermont and New Hampshire all have ambitions to reach net zero by or in 2050, although uncertainty around the evolution of renewable deployment requires us to be flexible.

#### How we are responding

- We will invest to enable the rise in electrification we expect to see across our regions and will advocate to manage an effective decarbonisation of our US gas networks.
- In the UK, we are delivering major transmission upgrade projects to connect more renewable energy to homes and businesses under the ASTI framework. We call this The Great Grid Upgrade, the largest overhaul of the electricity network in generations.
- In Upstate New York, we have committed to invest approximately \$4 billion to deliver over 1,000 miles of new transmission lines under the Upstate Upgrade project.
- NGV's 90 mile Propel NY energy electricity transmission project was selected by the New York Independent System Operator (NYISO) to connect offshore wind to New York. Propel will efficiently and cost-effectively deliver critical clean energy goals in one of the most urbanised areas on the planet enabling reduced network constraints and curtailment of generation, and ultimately lowering electricity costs to consumers.
- Across our own operations, we have worked with the Science Based Targets initiative (SBTi) to align our greenhouse gas emissions reduction targets to their 1.5°C pathway.



# Fairness and affordability



While we work to progress long-term affordability, we have created a

## c.£65 million

energy support fund pledged to help US and UK customers in financial distress due to rising energy costs

**We are committed to delivering the energy transition as efficiently and fairly as we can to create the best long-term value.**

### Impact on our industry

- We closely monitor developments in economic outlooks in the US and UK. An improving economic environment could deliver lower debt costs and reduce the number of projects which are delayed or cancelled, although borrowing costs will still remain a key consideration particularly for customers deciding whether to electrify heat and transport. The cost of materials remains elevated, which is particularly challenging for the offshore wind sector. For families, the cost of living crisis remains front of mind.

### How we are responding

- Our primary means of ensuring fairness and affordability is to operate efficiently and deliver our critical infrastructure projects on time and to budget.
- We work with governments and regulators in our regions to ensure that prudent long-term planning leads us to the best overall solution for the customer. In the UK, we have been vocal in our support for a strategic spatial energy plan, which provides a holistic approach to determining GB energy needs and how best to meet them, and are collaborating with partners to make this a reality.
- We also consider local context when making long term plans. In the US, we see an important role for decarbonised gas working alongside electrification to deliver an affordable transition.
- We provide value for customers by running our business efficiently. In November 2021, we announced a three-year programme to deliver efficiency savings of £400 million. We exceeded that target ahead of schedule this year, delivering £513 million in savings.
- Where we have the responsibility for procuring energy for customers, we use hedging processes (approved by our regulators) to mitigate wholesale energy price volatility.
- Beyond value for money, fairness is about ensuring all of our customers can depend on our networks to deliver energy reliably, and for our operations to be run safely. In 2023, National Grid received two Edison Electric Institute Emergency Recovery and Response awards, recognising the Company's exceptional emergency storm response during multiple severe weather events in Massachusetts.
- Our interconnectors strengthen security of supply by providing a proven, reliable way for electricity to flow between neighbouring counties. They also continue to make energy more affordable for consumers. Hitting UK government targets for interconnection could deliver up to an estimated £20 billion in energy costs for UK consumers in the run up to 2045.
- In the US, we offer a range of solutions for low- and moderate-income customers, including income-eligible monthly bill credits, payment plans, forgiveness programmes, grant programmes and personalised support, as well as energy-efficiency programmes for income-eligible customers.
- Despite these efforts, we recognise the ongoing cost of living crisis continues to present challenges to our customers that are beyond our direct control. From October 2022 to November 2022, we therefore pledged around £65 million (£50 million in the UK and \$17 million in the US) to help some of the hardest hit households. We are on track to meet this commitment, having disbursed £41.1 million in the UK and \$8.9 million in the US to date, supporting over 225,000 households in the UK alone.



# Technological change

## c.\$470 million

invested in new energy technology companies by National Grid Partners since its creation in 2018

**We expect technology to change rapidly on the demand and supply side of energy. In many industries, generative AI (including ours) will be a key enabler, but will also increase electricity demand. We will stay ahead of technological change, leveraging and enabling where we can, mitigating and preparing where we need.**

### Impact on our industry

- Innovations in energy technology continue to drive change in the pace and shape of the energy transition. The increased deployment of weather-dependent generation requires innovative technological and commercial processes to balance supply and demand and ensure resilience.
- Rapid developments in the capability of generative AI open new opportunities for energy industry applications including generation and demand forecasting, infrastructure planning, predictive maintenance and improvements to physical safety.
- Data centres which enable generative AI and digitalisation will be a significant source of future energy demand. The likely scale of this impact is still evolving and we are monitoring closely.
- Cyber security and resilience are key priorities for us, as is the ethical and safe use of generative AI technologies.

### How we are responding

- In Upstate New York, we have installed 128,000 of a planned 1.7 million of advanced next-generation electricity meters, enabling customers to understand their energy usage, allowing us to deliver innovative new tariffs and to detect network faults more quickly. In Massachusetts, we have just launched a similar programme to replace 1.4 million electricity meters.
- We invest in technology to unlock flexibility in supply and demand and to provide targeted solutions to network constraints, as reflected in UK ED's DSO Strategic Action Plan, launched in March 2024.
- We are constantly innovating to reduce emissions from our own operations and have declared that all our assets will be free of Sulphur Hexafluoride (SF<sub>6</sub>), an insulating gas which is harmful to the environment, by 2050. The alternative we have developed (g3), is significantly less harmful to the environment and is being deployed at our substations.
- National Grid Partners has invested c.\$470 million in 50 startups and strategic funds since 2018. Four of the investments are in companies that have exceeded a \$1 billion valuation. Our portfolio includes leading edge electricity network technologies, such as advanced conductors and dynamic line rating which will help us expand capacity on our existing networks, as well as companies that use artificial intelligence to help us improve cyber security and maintain our networks.
- We have established a leadership and governance group for generative AI, and in January 2024, after trials in the US and UK, we launched GridGPT, our internal generative AI service, which is protected from the public domain.
- Our market analytics team is modelling scenarios for the future development of AI and data centre demand growth, and we are working with the sector on its connection needs.
- We are compliant with NERC CIP standards for cyber security in the US. In the UK, we are compliant with similar Network and Information Systems (NIS) regulations. Across National Grid, we robustly monitor cyber risk, with a comprehensive set of controls, including training and interactive campaigns to test engagement of employees. In the UK, we are constructing a new Network Control Centre to deliver improvements to physical and cyber security, as well as delivering greater operational capability.

# Global uncertainty



## >2 billion

people expected to vote in national elections across the world in 2024

**Geopolitical tensions and competition for resources threaten supply chains, while looming elections bring policy uncertainty that could impact our ability to plan.**

### Impact on our industry

- Geopolitical volatility is the biggest risk identified in the World Economic Forum's Chief Risk Officers' Outlook, 2023.
- In the UK, an election must happen before January 2025, and while we expect all major parties to present competing targets for electricity infrastructure and decarbonisation, we expect any election outcome to support National Grid's plans in the UK.
- The US presidential election will happen in November 2024. While policy differences between the two parties create uncertainty for electricity infrastructure projects which rely on federal incentives many of the policies and regulations which affect our businesses are set at the state level.
- Conflict in the Middle East and the possibility of escalation continues to threaten supply chains for oil and gas. Energy supply chains have adjusted to the cessation of Russian gas imports to Europe but energy security remains a top priority.
- In response to this volatile global environment, governments are implementing policies to provide greater certainty and opportunity for our sector, including the following:
  - The UK's Energy Act received Royal Assent in October 2023 and sets the foundation for the future of energy in the UK, including the establishment of an Independent System Operator and Planner (ISOP). The ESO is expected to form the core of this body, NESO, from the second half of 2024.
  - In the US, a July 2023 Federal Energy Regulatory Commission (FERC) ruling streamlines the connection of new energy resources to the grid.
  - The Massachusetts Department for Public Utilities (DPU) has called upon all electricity companies in the state to submit an Electric Sector Modernization Plan (ESMP).
  - Both the DPU in Massachusetts and the Public Service Commission (PSC) in New York are engaging with utilities on long-term plans for gas.

### How we are responding

- We continually review our strategy in response to changes in our business environment, and closely monitor geopolitical and economic shifts.
- We are active participants in the broader energy sector ecosystem across the US and the UK, to establish policy that maximises the chance of a smooth energy transition. This engagement helps us to evolve regulatory frameworks together and to provide more certainty through price controls, which reflect a healthy balance of risk, returns and incentives.
- Our 'Delivering for 2035' report in the UK lays out five priority areas where action is needed from industry, the UK government and Ofgem to meet the UK's target to decarbonise the power system by 2035. You can read more here: [nationalgrid.com/document/149501/download](https://nationalgrid.com/document/149501/download).
- In the UK, we are pursuing efforts to mitigate supply chain uncertainty. For example, SI's Great Grid Partnership is a collaborative delivery alliance with two design partners and five construction partners, offering long-term visibility of our demand to allow our partners to build up their capacity and capability. We have also created a tender framework for High Voltage Direct Current (HVDC) cable suppliers to accelerate contract awards in the UK.



# Succeeding with our strategy

Our vision is to be at the heart of a clean, fair and affordable energy future. This was guided by four strategic priorities for the 2023/24 financial year.



Further reading:  
Our principal risks and uncertainties on **pages 24 – 30**



## Enable the energy transition for all

### What this means

We will increase the positive impact we have on the environment and society by innovating and influencing policy to enable clean electricity, decarbonise our gas networks, and for electrified heat and transport to connect to our networks.

#### Business environment links:

1. Net zero
2. Fairness and affordability
3. Technological change
4. Global uncertainty

#### KPI link:

- Group capital investment
- Green capital investment
- Climate change – Scope 1, 2 and 3 emissions

# £8.2 billion

Group capital investment over the past year

### 2023/24 achievements

- In UK ET, we reached significant milestones of installing overhead lines on all 116 T-pylons as part of the Hinkley connection project, and the final breakthrough on our £1 billion London Power Tunnels project. We committed to halve our SF<sub>6</sub> emissions by 2030.
- In UK ED, we remain committed to improving its flexibility service offerings, resulting in over £80 million of reinforcement work being deferred, which reduces costs for consumers. We are also trialling heat pump flexibility with over 1,000 customers (EQUINOX).
- In the US, we submitted rate case filings outlining the investments needed to deliver the infrastructure which will enable the transition to clean and affordable energy.

- Our New York business awarded funds for various projects including a facility to produce carbon-free hydrogen. We have received requests to connect enough Renewable Natural Gas (RNG) to our network to meet the demand of around 80,000 homes and displace nearly 53,000 metric tonnes of CO<sub>2</sub>.
- Our sixth interconnector, Viking Link, became operational in December 2023. It stretches for 475 miles between GB and Denmark, making it the longest subsea interconnector in the world, with enough capacity to supply up to 2.5 million UK homes.
- NG Renewables is constructing projects to deliver over 700 MW of solar generation capacity across Ohio, Kentucky and South Dakota.



## Deliver for customers efficiently

### What this means

Our investments in energy system decarbonisation are underpinned by a track record of operational excellence and financial discipline, ensuring the affordable delivery of safe, reliable and resilient energy for our customers.

#### Business environment links:

1. Net zero
2. Fairness and affordability
3. Technological change
4. Global uncertainty

#### KPI link:

- Network reliability
- Underlying EPS
- Group RoE
- Total asset growth

### 2023/24 achievements

- In UK ET, we maintained world-class reliability despite the country experiencing 13 named storms.
- In UK ET, we are working with the UK government and the ESO to drive connections reform. New queue management arrangements will give greater priority to connection-ready schemes.
- In UK ED, we have made over 80,000 low-carbon technology (LCT) connections, with 89% of direct enquiries approved on the same day. By implementing changes to our licence through the Network Access Significant Code Review, we have reduced connection costs for customers.
- The ESO continues to operate one of the fastest decarbonising, most reliable networks in the world and has delivered the demand flexibility service for two consecutive years. This improves the energy system resilience by incentivising consumers to shift their demand at peak times.

- Our LNG terminal in the UK is undergoing a major capacity expansion. When complete, the site will be able to deliver enough gas to meet 33% of the UK's current gas demand, which is critical for national energy security.
- In the US, we have set up a Rapid Results Office (RRO) to improve customer experience which introduced a programme called 'Find it & Fix it'. This provides a channel for employees to address customer issues quickly.
- In New York, our Future of Electric Networks plan aims to enable the installation of 4,000 EV charging ports, the connection of over 190 MW of Distributed Energy Resources (DER) and the streamlining of several related processes.
- In New England, we worked closely with local officials and other stakeholders to repair or replace gas infrastructure on 24 bridges against a target of 21.

# 99.9%

of UK ED customers restored within 24 hours during four major storms



## Grow our organisational capability

### What this means

To deliver our part in a changing energy system, we are transforming our internal processes, strengthening our customer focus and sharpening our commercial edge. We are investing in the capabilities we will need in future and our ability to operate safely remains our top priority.

#### Business environment links:

1. Net zero
2. Fairness and affordability
3. Technological change
4. Global uncertainty

#### KPI link:

- Customer satisfaction
- Group LTIFR

# 0.08

Lost time injury frequency rate (LTIFR)  
(target: equal or less than 0.10)

### 2023/24 achievements

- Our new Strategic Infrastructure business unit has been set up to deliver 17 ASTI projects in the UK, as well as other strategic projects to help us deliver on our net zero ambitions and help the UK government meet its target of 50 GW of renewable energy by 2030.
- To support our larger capital projects in the UK, we have transformed our procurement processes and are collaborating more closely than ever with our supply chain to deliver ASTI projects at pace. We have established an HVDC framework to secure offshore supply chains and our Enterprise Delivery Model fosters collaboration and sharing of best practice through our supply chain.
- The ESO is undergoing a significant capability build in readiness for its expected roles as it separates from the Group. Across our shared services, we are working diligently to ensure a smooth transition.
- In UK ED, we have mobilised a new operating model which builds on the strength of our local delivery expertise and have introduced dedicated functions for customer excellence, asset management, connections and system operation (DSO). The DSO is overseen by an independent panel, which we have established this year.
- In Massachusetts, we launched a state-wide workforce development programme to give career development and employment opportunities to trainees from under-represented groups through four clean energy academies.
- In New York, we use AI to help assess field activity on our gas assets to help manage safety risks. This pioneering use of science to enhance safety was recognised with an award at the American Gas Association Operations Conference.
- NGV has invested in increased capability within business development and commercial roles.



## Empower colleagues for great performance

### What this means

Our colleagues shape the delivery of outcomes that exceed the expectations of all our stakeholders. By attracting diverse talent and developing our people, we will ensure our colleagues are best placed to work towards a clean energy future.

#### Business environment links:

1. Net zero
2. Fairness and affordability
3. Technological change
4. Global uncertainty

#### KPI link:

- Employee engagement index
- Workforce diversity – ethnicity
- Workforce diversity – gender

# 81%

Employee engagement index score  
in our 2024 employee survey

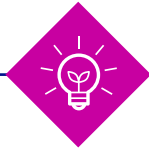
### 2023/24 achievements

- Across National Grid, physical safety and the safety to speak up is a top priority, especially in light of the tragic fatalities of two of our colleagues, as well as a police officer who was on duty at a job site, in the past year. We are focused on ensuring colleagues feel comfortable to raise safety concerns so that they are addressed. In NGV, for example, our employee survey showed 93% of colleagues felt their manager encouraged them to talk openly about safety.
- We were rated one of the top 50 employers in the UK for social mobility and earned an Equality 100 Award as a leader in LGBTQ+ workplace inclusion.
- 107 graduates joined our new graduate scheme in 2023.
- We continue to invest in colleagues at all levels with training and development opportunities, including 'First Line Leader' for new people leaders. In 2023/24, 200 colleagues participated in digital coaching.
- We became a constituent of the Bloomberg Gender Equality Index for the third year running and were in The Times Top 50 Employers for Gender Equality in 2023.
- Our employee engagement index is 4% above the high-performing norm.
- In February 2024, we were listed as the top performing utility in the 'Achieving Gender Balance' publication from FTSE Women Leaders Review, with 48.7% female representation across the Executive Committee and its direct reports. We met the 'FTSE 100 40% women on boards' target 2 years ahead of the 2025 deadline.
- In UK ED, we created an action plan focusing on increasing DEI awareness, increasing and retaining diversity in our workforce and increasing leadership awareness and inclusion skills. The year concluded with a 'first of a kind' conference focused on building Gender Inclusion in the workplace, bringing together 192 colleagues of all backgrounds – predominantly women in operations as well as allies.
- In the US, we strive to ensure equitable representation, retention and promotion within our New York field operations. As a result of this concerted effort, gender attrition in field and operations in our New York business has reversed and gender diversity has increased for the first time in five years.

# Our key performance indicators (KPIs)

We use a range of metrics, reported periodically, against which we measure Group performance. In 2023/24, these metrics were aligned to our four strategic priorities.

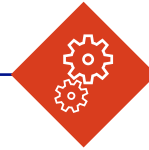
## Links to strategy



**Enable the energy transition for all**



**Deliver for customers efficiently**



**Grow our organisational capability**



**Empower colleagues for great performance**

## Financial measures

KPI and performance	Strategy link	Progress in 2023/24
<p><b>Underlying EPS (p)*</b> <span style="color: #0070C0;">▲</span></p> <p>This is a measure of the Group's profitability for the year attributable to equity shareholders of the Group. It excludes exceptional items, remeasurements, timing, impact of deferred tax on underlying tax in UK regulated businesses (UK ET and UK ED) and major storms from its calculation.</p> <p><b>As part of our new five-year financial framework, our target is to grow Underlying EPS 6-8% CAGR over the period to March 2029**</b></p> <p>2023/24 <span style="color: #0070C0;">■</span> 78.0p                      2022/23 <span style="color: #0070C0;">■</span> 74.5p                      2021/22 <span style="color: #0070C0;">■</span> 69.0p</p>		<p>Underlying EPS grew by 5% driven by strong performance in UK ET and New York, coupled with lower finance costs. This is partly offset by one-off property sales in prior year, lower UK ED returns under RIIO-ED2 and lower contribution from our share in joint ventures.</p>
<p><b>Group capital investment (£m)***</b></p> <p>We plan to invest around £60 billion in the five-year period from April 2024 to March 2029 across all areas of the Group and are one of the FTSE's biggest investors in the delivery of net zero. This KPI measures our annual capital investment.</p> <p>2023/24 <span style="color: #0070C0;">■</span> £8,235m                      2022/23 <span style="color: #0070C0;">■</span> £7,593m                      2021/22 <span style="color: #0070C0;">■</span> £6,623m</p>		<p>The growth in capital investment was principally driven by higher levels of investment to drive forward energy transition and deliver energy security across all business units.</p>
<p><b>Green capital investment (£m) <span style="color: #0070C0;">▲</span></b></p> <p>Our target is to deliver £51 billion of green capital investment across the five-year period from April 2024 to March 2029.</p> <p>2023/24 <span style="color: #0070C0;">■</span> £5,992m                      2022/23 <span style="color: #0070C0;">■</span> £5,557m                      2021/22 <span style="color: #0070C0;">■</span> £4,519m</p>		<p>In 2023/24, we delivered £6.0 billion of green capital investment aligned to the EU Taxonomy, a £0.4 billion increase on 2022/23. This consisted primarily of investment in key infrastructure projects to support net zero.</p>
<p><b>Group RoE (%) <span style="color: #0070C0;">▲</span></b></p> <p>In calculating Group RoE, we measure our performance in generating value for shareholders by dividing our 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.</p> <p><b>Target: 8.25% – 9.5% each year</b></p> <p>2023/24 <span style="color: #0070C0;">■</span> 8.9%                      2022/23 <span style="color: #0070C0;">■</span> 11.0%                      2021/22 <span style="color: #0070C0;">■</span> 11.4%</p>		<p>Across the Group, we achieved a RoE of 8.9% in 2023/24, down on the prior year by 210 basis points. Group RoE was driven principally by a lower contribution from UK ED in the first year of RIIO-ED2, lower non-regulated profits reflecting property sales in the prior year, lower Interconnector revenues, and higher opening equity which was driven by prior period performance, growth and RAV indexation.</p>
<p><b>Total asset growth (%) <span style="color: #0070C0;">▲</span></b></p> <p>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.</p> <p><b>Target of c.10% CAGR asset growth April 2024 to March 2029 (from a March 2024 baseline)</b></p> <p>2023/24 <span style="color: #0070C0;">■</span> 9.7%                      2022/23 <span style="color: #0070C0;">■</span> 11.4%                      2021/22 <span style="color: #0070C0;">■</span> 8.7%</p>		<p>Asset growth during the year was 9.7% (2022/23: 11.4%). This was driven by the £8.2 billion Group capital investment along with the impact of indexation in respect of the UK RAV. Asset growth is lower than in 2022/23 predominantly due to a lower indexation of UK regulated assets, driven by a lower inflation rate.</p>

\* Prior year comparatives restated to remove the impact of deferred tax on underlying profits in UK regulated businesses (UK ET and UK ED).

\*\* From a baseline of 2024/25 Underlying EPS once the Rights Issue has completed.


\*\*\* Prior year comparatives have been restated to reflect the change in our 'capital investment' definition. Refer to page 61 for the updated definition.



















## 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. These measures are either specifically accounted for in remuneration targets or considered as part of a review of wider business performance. For further detail, please see our Directors' Remuneration Report, on pages 98 – 114.


 Indicates an alternative performance measure

 **PwC Assured Data**  
We engaged PricewaterhouseCoopers LLP (PwC) to undertake a limited assurance engagement, using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and ISAE 3410: 'Assurance Engagements on Greenhouse Gas Statements' over a range of data points within our RBR. The metrics identified with the leaf symbol, featured on page 1, pages 19 – 21 and page 58 are included in the scope of their work. Details of PwC's full limited assurance opinion and National Grid's Reporting Methodology are set out in the RBR, which will be published in due course.

## Non-financial measures

KPI and performance	Strategy link	Progress in 2023/24																																																				
<p><b>Climate change – Scope 1, 2 and 3 emissions*</b></p> <p>In 2023, our revised near-term GHG emissions targets were validated by the SBTi as being in line with climate science. Our key GHG emissions targets are to reduce absolute Scope 1 and Scope 2 GHG emissions by 60% by 2030/31 from a 2018/19 baseline and reduce absolute Scope 3 GHG emissions (excluding sold electricity) from the same baseline by 37.5% by 2033/34.</p> <p>Ultimately, we are helping to tackle climate change by enabling the energy transition for all and targeting net zero for our own emissions by 2050.</p> <p><b>Scope 1 and 2 GHG emissions</b></p>  <p><b>Scope 3 GHG emissions</b></p>  <p>Figures are in million tonnes of CO<sub>2</sub> equivalent.</p> <p>* In setting our new near-term SBTi approved targets, we follow the WRI/WBCSD GHG Protocol guidance and recalculated our new baseline (2018/19), aligning with our Recalculation Policy. This includes recalculating 2022/23 and 2021/22 comparative figures to reflect improved calculation methodology.</p> <p> You can read more about the Task Force on Climate-related Financial Disclosures (TCFD) and our wider sustainability activities and performance on pages 44 – 58.</p>		<p>We have increased our ambition by updating our near-term emissions reduction targets in 2023. These new targets will mean greater emissions reductions across our Scope 1, 2 and 3 GHG emissions, aligned to our strategy and investment programmes.</p> <p>Our combined Scope 1 and 2 GHG emissions for 2023/24 were 6,852 ktCO<sub>2</sub>e, representing a 5.9% reduction in comparison to the prior year and a 11.8% reduction against the 2018/19 baseline.</p> <p>In 2023/24, GHG emissions originating from our electricity generation facilities in New York, which supply capacity to the Long Island Power Authority (LIPA) through fixed term power supply agreements on Long Island, experienced a reduction of 12.4%. These emissions accounted for 2,711 ktCO<sub>2</sub>e of our total Scope 1 GHG emissions. Leaks and venting from our gas transmission and distribution systems also drive Scope 1 emissions. Removing or adding assets is the main factor affecting emissions totals. Our New York and New England business units continue to deliver our Leak-Prone Pipe (LPP) programme, contributing to in-year reductions. SF<sub>6</sub> leaks from our electric equipment is the final key component of Scope 1 emissions, the majority of which (~80%) is in our UK ET network. SF<sub>6</sub> emissions reduced 4.3% from 278 ktCO<sub>2</sub>e to 266 ktCO<sub>2</sub>e in comparison to the prior year with a 24.7% reduction against the 2018/19 baseline.</p> <p>The majority of our Scope 3 GHG emissions are from the gas and electricity we sell to our customers. Our total Scope 3 GHG emissions decreased by 1.7% year-on-year. Against our SBTi approved target (which excludes sold electricity) our Scope 3 GHG emissions have increased by 0.8% since 2018/19. This was principally driven by emissions linked to our higher annual spend in relation to purchased goods and services (including capital investment) within our supply chain. The bulk of these emissions come from resource-intensive activities associated with constructing new energy infrastructure. Longer term, we expect a decline in the carbon intensity of materials and sectors and anticipate a reduction in our supply chain emissions. We aim to accelerate this by actively encouraging our suppliers to establish action plans and adopt science based decarbonisation targets of their own.</p>																																																				
<p><b>Network reliability</b></p> <p>We aim to deliver reliability by planning our capital investments to meet challenging demand and supply patterns, designing and building robust networks, and 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.</p> <table border="1"> <thead> <tr> <th>%</th> <th>2023/24</th> <th>2022/23</th> <th>2021/22</th> </tr> </thead> <tbody> <tr> <td>UK ET</td> <td>99.999998</td> <td>99.99997</td> <td>99.99993</td> </tr> <tr> <td>UK ED</td> <td>99.99261</td> <td>99.99453</td> <td>99.99469</td> </tr> <tr> <td>NE Electricity Transmission</td> <td>99.97549</td> <td>99.95212</td> <td>99.97636</td> </tr> <tr> <td>NY Electricity Transmission</td> <td>99.97168</td> <td>99.97189</td> <td>99.95261</td> </tr> <tr> <td>NE Electricity Distribution</td> <td>99.94327</td> <td>99.96824</td> <td>99.92725</td> </tr> <tr> <td>NY Electricity Distribution</td> <td>99.92823</td> <td>99.92384</td> <td>99.95681</td> </tr> <tr> <td colspan="4"><b>Interconnector availability</b></td> </tr> <tr> <td>IFA interconnector </td> <td>82.0</td> <td>51.7</td> <td>61.3</td> </tr> <tr> <td>IFA2 interconnector </td> <td>71.2</td> <td>95.7</td> <td>90.4</td> </tr> <tr> <td>BritNed interconnector </td> <td>98.0</td> <td>99.9</td> <td>80.4</td> </tr> <tr> <td>NSL interconnector </td> <td>95.9</td> <td>86.7</td> <td>63.3</td> </tr> <tr> <td>Nemo Link interconnector</td> <td>96.8</td> <td>98.1</td> <td>99.0</td> </tr> </tbody> </table>	%	2023/24	2022/23	2021/22	UK ET	99.999998	99.99997	99.99993	UK ED	99.99261	99.99453	99.99469	NE Electricity Transmission	99.97549	99.95212	99.97636	NY Electricity Transmission	99.97168	99.97189	99.95261	NE Electricity Distribution	99.94327	99.96824	99.92725	NY Electricity Distribution	99.92823	99.92384	99.95681	<b>Interconnector availability</b>				IFA interconnector 	82.0	51.7	61.3	IFA2 interconnector 	71.2	95.7	90.4	BritNed interconnector 	98.0	99.9	80.4	NSL interconnector 	95.9	86.7	63.3	Nemo Link interconnector	96.8	98.1	99.0		<p>In both the UK and US, we continued to maintain high levels of reliability on all our networks.</p> <p>Viking Link became operational in December 2023 so has not been reported this year.</p>
%	2023/24	2022/23	2021/22																																																			
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Non-financial measures

KPI and performance	Strategy link	Progress in 2023/24																														
<p><b>Customer satisfaction</b></p> <p>We measure customer and stakeholder satisfaction, while also maintaining engagement with these groups and improving service levels.</p> <table border="1"> <thead> <tr> <th></th> <th>2023/24</th> <th>2022/23</th> <th>2021/22</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>UK ET (/10)</td> <td>7.2</td> <td>7.2</td> <td>7.8</td> <td>7.7</td> </tr> <tr> <td>ESO (/10)</td> <td>6.5</td> <td>7.3</td> <td>7.3</td> <td>8.15</td> </tr> <tr> <td>UK ED (/10)</td> <td>8.97</td> <td>8.99</td> <td>9.03</td> <td>9.12</td> </tr> <tr> <td>NE residential — Customer Trust Advice survey (%)</td> <td>49.4</td> <td>50.5</td> <td>59.8</td> <td>–</td> </tr> <tr> <td>NY residential — Customer Trust Advice survey (%)</td> <td>59.1</td> <td>58.9</td> <td>64.3</td> <td>–</td> </tr> </tbody> </table>		2023/24	2022/23	2021/22	Target	UK ET (/10)	7.2	7.2	7.8	7.7	ESO (/10)	6.5	7.3	7.3	8.15	UK ED (/10)	8.97	8.99	9.03	9.12	NE residential — Customer Trust Advice survey (%)	49.4	50.5	59.8	–	NY residential — Customer Trust Advice survey (%)	59.1	58.9	64.3	–		<p>UK ET's scoring reflects the impacts felt by customers, but the business has taken a number of steps to help improve the connections process. UK ET has advocated for significant reform, supporting short-term initiatives to accelerate grid connections, whilst working closely with ESO and industry partners to deliver a process to connect viable projects faster and achieve government decarbonisation targets.</p> <p>ESO's customer satisfaction score reflects customer feedback regarding responsiveness to queries and timely delivery of projects. The last 12 months have been challenging for Connections, but ESO is taking its customers on a journey towards longer-term connections reform, which is underway and on track, against a backdrop of exponentially rising connections applications in the pipeline. This is an area that ESO continues to focus on with its customer work and in its overall priority areas.</p> <p>The US metric measures customers' sentiment with National Grid by asking their level of trust in our advice to help them make good energy decisions. Customers continue to face high energy prices that negatively impact their sense of value, a key driver of Trust Advice.</p> <p>Due to the low scores, we continue to take action in several areas to improve customers' value perception, as customers across the footprint remain concerned about paying their utility bill. To mitigate this impact, National Grid has launched several programmes including the 'Here to Help' bill assistance campaign and community outreach events.</p>
	2023/24	2022/23	2021/22	Target																												
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<p><b>Group lost time injury frequency rate (LTIFR) (LTIs per 100,000 hours worked)</b></p> <p>This is the number of worker LTIs per 100,000 hours worked in a 12-month period (including fatalities) and includes our employee and contractor population.</p> <p>Target: 0.1 LTIs per 100,000 hours worked</p> <table border="1"> <tbody> <tr> <td>2023/24</td> <td>0.08</td> <td></td> </tr> <tr> <td>2022/23</td> <td>0.11</td> <td></td> </tr> <tr> <td>2021/22</td> <td>0.13</td> <td></td> </tr> </tbody> </table>	2023/24	0.08		2022/23	0.11		2021/22	0.13			<p>Safety continues to be a fundamental underpin to our Executive Directors' remuneration, reflecting the expectation that safety is an integral part of how we work at National Grid.</p> <p>As at 31 March 2024, our LTIFR was 0.08, which is lower than the Group target of 0.10. This is a combined employee and contractor LTI rate, which reflects our continued focus on encouraging good safety behaviours across the entire workforce.</p> <p>In August 2023, a fatality occurred in Ludlow, Shropshire (see page 33). We have undertaken our internal review as part of continually improving our safety processes and sought to reinforce measures across our operations. In December 2023, we lost a Gas Distribution colleague and police officer in Massachusetts, both of whom were fatally injured by a vehicle driven by a member of the public while on duty at a job site (see page 34).</p>
2023/24	0.08										
2022/23	0.11										
2021/22	0.13										

<p><b>Employee engagement index (%)</b></p> <p>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.</p> <table border="1"> <tbody> <tr> <td>2023/24</td> <td>81%</td> </tr> <tr> <td>2022/23</td> <td>81%</td> </tr> <tr> <td>2021/22</td> <td>81%</td> </tr> </tbody> </table>	2023/24	81%	2022/23	81%	2021/22	81%		<p>We run an employee engagement survey, Grid:voice, twice-yearly, to understand and act on colleague feedback. This allows us to build a culture that is purpose-led and results-driven, with a great colleague experience. As a result, we enjoy high engagement and strong advocacy, above external benchmarks.</p> <p>This year, 78% of colleagues took part in the survey (last year: 81%) and our employee engagement index score was 81% favourable. There was no change compared with the previous year, but this score is positive in a year of change across the organisation and remains four points higher than the high performing companies average.</p>
2023/24	81%							
2022/23	81%							
2021/22	81%							

KPI and performance	Strategy link	Progress in 2023/24						
<p><b>Workforce diversity (%) – ethnicity</b></p> <p>We measure the percentage of ethnic minorities in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 40).</p> <table border="1"> <tr><td>2023/24</td><td>18.6%</td></tr> <tr><td>2022/23</td><td>17.5%</td></tr> <tr><td>2021/22</td><td>20.2%</td></tr> </table>	2023/24	18.6%	2022/23	17.5%	2021/22	20.2%		<p>Our ethnic diversity for 2023/24 was 18.6%; reflecting a slight increase compared to the previous year. While the improvement is only +1.1%, it is important to note that National Grid has witnessed sizeable growth in its ethnic minority headcount. Over the course of 2023/24, new employees from diverse ethnic backgrounds have joined our organisation, representing around a 13% increase in our ethnically diverse population.</p>
2023/24	18.6%							
2022/23	17.5%							
2021/22	20.2%							
<p><b>Workforce diversity (%) – gender</b></p> <p>We measure the percentage of women in our workforce. We aim to develop and operate a business that has an inclusive and diverse culture (see page 40).</p> <table border="1"> <tr><td>2023/24</td><td>24.6%</td></tr> <tr><td>2022/23</td><td>23.6%</td></tr> <tr><td>2021/22</td><td>23.1%</td></tr> </table>	2023/24	24.6%	2022/23	23.6%	2021/22	23.1%		<p>Our gender diversity for 2023/24 was 24.6%. We were ranked number four, in the Top Ten Best Performers of the FTSE 100 Women Leaders Review. This is as a result of the increase in representation of women in leadership positions (Group Executive Committee and direct reports).</p>
2023/24	24.6%							
2022/23	23.6%							
2021/22	23.1%							

## Looking ahead

Updated five-year financial framework for the period 2024/25 – 2028/29 is set out below. It highlights the strong growth opportunities we have ahead of us and acts as an important basis for us to communicate our plans and investment case to investors.

### Five-Year Financial Framework

2024/25 – 2028/29<sup>1</sup>

<p><b>Capital investment</b></p> <p>One of the FTSE’s biggest investors in delivering the energy transition</p> <p>Around</p> <p><b>£60bn</b> <b>c.£51bn</b> green<sup>2</sup>, directly into the decarbonisation of energy networks, aligned to EU Taxonomy</p> <ul style="list-style-type: none"> <li>1 <b>c.£23bn</b> UK ET</li> <li>2 <b>c.£8bn</b> UK ED</li> <li>4 <b>c.£11bn</b> New England Regulated</li> <li>5 <b>c.£17bn</b> New York Regulated</li> <li>6 <b>c.£1bn</b> NGV</li> </ul>	<p><b>Group asset growth</b></p> <p><b>c.10%</b> CAGR<sup>3</sup></p> <p><b>Balance sheet and ratings</b></p> <p>Credit metrics maintained above current rating thresholds<sup>5</sup></p> <p>Regulatory gearing to fall to low-60% range by March 2025, then trend back towards the high-60% range by the end of RIIO-T3</p> <p>Use of hybrid debt</p>	<p><b>Underlying EPS</b></p> <p><b>6–8%</b> CAGR<sup>4</sup></p> <p><b>Dividend and Equity</b></p> <p>Aim to grow dividend per share in line with UK CPIH<sup>6</sup></p> <p>Net Rights Issue proceeds of £6.8bn in 2024/25</p> <p>Continued use of scrip dividend</p>
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- 1 April 2024 – 31 March 2029.
- 2 Aligned to EU Taxonomy, directly invested into the decarbonisation of energy networks.
- 3 Group asset compound annual growth rate from a 2023/24 baseline. Forward years based on assumed USD FX rate of 1.25; and long run UK CPIH and US CPI. Assumes sale of ESO, Grain LNG, and National Grid Renewables before 2029. Assumes remaining 20% stake in UK Gas Transmission treated as a discontinued operation and therefore does not contribute to Group asset growth.
- 4 EPS compound annual growth rate from a 2024/25 baseline. Forward years based on assumed USD FX rate of 1.25; long run UK CPIH, US CPI and interest rate assumptions and scrip uptake of 25%. Assumes sale of ESO, Grain LNG, and National Grid Renewables before 2029. Assumes remaining 20% stake in UK Gas Transmission treated as a discontinued operation and therefore does not contribute to underlying EPS.
- 5 Through to at least the end of the RIIO-T3 price control period.
- 6 Aim to increase the 2024/25 DPS by UK CPIH following the rebase of the 2024/25 DPS of 58.52 pence, after taking account of the new shares issued following the Rights Issue.



# 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 position, our operational results, our reputation and the value of our shares. We deploy an industry good practice 'Three Lines' model to deliver our risk management and internal control activities.

This establishes clear roles and ways of working between different groups (first line management, second line risk and compliance, and the third line independent Corporate Audit) to ensure effective implementation and assurance of the Enterprise Risk Management (ERM) framework and adherence with our Enterprise Risk and Assurance Business Management System which sets the performance requirements the business should follow.

## Governance and oversight

The Board is accountable for the Group's risk management and internal control systems with oversight responsibilities carried out by the Audit & Risk Committee (see pages 90 – 95). The Board sets and monitors the amount of risk the Group is prepared to seek or accept in pursuing our strategic priorities (our risk appetite) across our risk taxonomy categories and sets risk appetite for our Group Principal Risks (GPRs). The business then develops appropriate risk responses and mitigations to ensure risks are managed within appetite in line with our ERM framework.

All GPRs are reviewed by the Group Executive Ethics, Risk & Compliance Committee, Audit & Risk Committee and the Board at least twice annually.

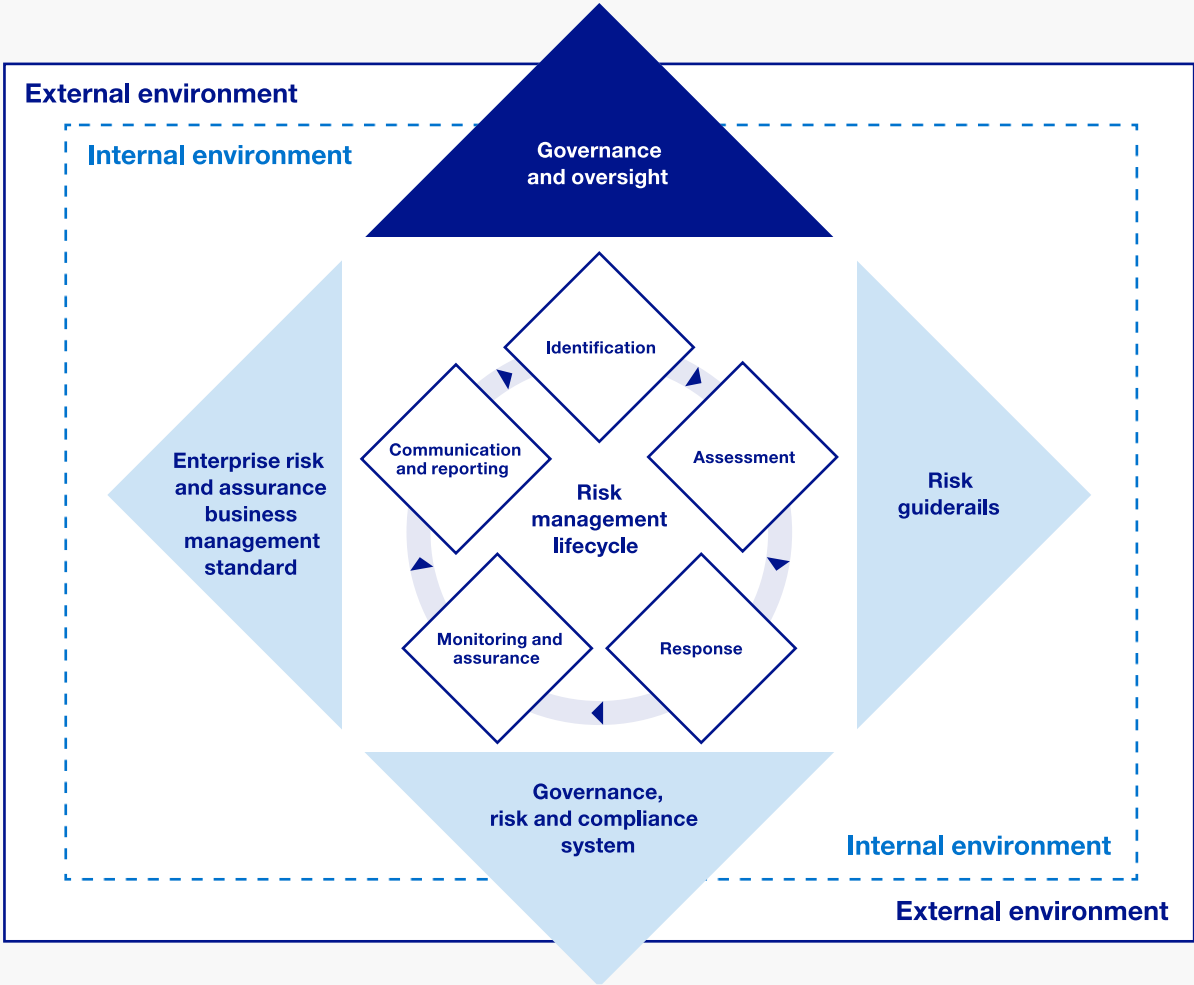
<h3>Strategic</h3> <p>Strategic risks are risks, both internal and external, associated with the business model, corporate strategy and long-term planning.</p>	<h3>Operational</h3> <p>Operational risks are risks derived from National Grid's core business practices, which rely on our systems, equipment, processes and people.</p>	<h3>Compliance</h3> <p>Compliance risks are risks relating to compliance with laws and regulations, industry standards, contract requirements and internal policy.</p>	<h3>Financial</h3> <p>Financial risks are risks associated with National Grid's ability to raise capital, maintain access to capital and deliver profitable growth.</p>
<ul style="list-style-type: none"> <li> Satisfactory regulatory outcomes</li> <li> Climate change mitigation</li> <li> Political and societal expectations</li> <li> People capability and capacity</li> </ul>	<ul style="list-style-type: none"> <li> Catastrophic cyber security incident</li> <li> Significant disruption of energy</li> <li> Upstream supply</li> <li> Significant safety or environmental event</li> <li> Major capital programmes</li> </ul>	<ul style="list-style-type: none"> <li> Legal and regulatory compliance frameworks operate at a jurisdictional level (i.e. UK, US federal, New York and Massachusetts) and therefore apply across all relevant GPRs</li> </ul>	<ul style="list-style-type: none"> <li> Financing our business</li> </ul>

**Our ERM framework**

National Grid’s ERM framework sets out our strategy, policy and process to identify, assess, prioritise, respond to, monitor and report on the most important risks to our business in a standardised, effective and efficient way. It supports the delivery of our vision and strategy as described on pages 16 and 17.

We assess the effectiveness of our framework by reviewing implementation and operation across the organisation through Group Principal Risk reviews during the year, monitoring and assurance reporting on key controls by first-line and second-line teams across the Group and the results of the Certificate of Assurance (CoA) process as described on page 94.

The Board also assesses the GPRs, emerging risks and monitors the effectiveness of the risk management and internal control process through reporting and challenge sessions twice annually. The Board has confirmed the effectiveness of National Grid’s system of risk management and internal control.



**Governance (Board and Audit & Risk Committee, Management Oversight Committees)**  
 Establishes the vision, values and strategic objectives of the business, and provides governance and oversight of the risk management framework and reporting.

**First line: Business**  
 Establishes the business practices, processes and activities to achieve business objectives whilst managing risk in line with policies and procedures.

**Second line: Business advice and assurance**  
 Establishes policies, processes and procedures for National Grid’s risk management framework and provides oversight, assurance and reporting to governance bodies. As the first line matures and takes on more responsibility for risk management, the level of support of second line decreases.

**Third line: Internal audit**  
 Provides independent assurance to governance bodies over the Company’s system of risk management through internal control reviews and advisory engagement on the internal control framework.

# 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 strategic priorities.**

The ERM framework applies to all risks of reasonable magnitude. The GPRs are the most important risks to the organisation and the management of these risks, including the effectiveness of internal controls, is reviewed regularly, including as part of our annual effectiveness assessment.

Our GPRs, 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 226 – 231, and specifically our key financial risks, which are incorporated within note 32 to the consolidated financial statements on pages 193 – 204.

Risk trends reported below consider the changing risk landscape, our risk response, including controls and any additional mitigation actions, and may be influenced by internal or external developments.



## Operational risks

**Risk trend key:**

Increasing

Decreasing

No change

### Catastrophic cyber security incident

#### Description

We are unable to adequately anticipate and manage disruptive forces on our systems because of a cyber-attack, poor recovery of critical systems or malicious external or internal parties resulting in an inability to operate the network, damage to assets, loss of confidentiality, integrity and/or availability of systems.

#### Actions taken by management

We employ technical, administrative and physical cyber security controls for both Information Technology (IT) and Operational Technology (OT) that align to the National Institute of Standards and Technology Cybersecurity Framework (NIST CSF) v1.1, as well as all applicable laws and regulations. Controls are verified and validated through internal and external audits and risk assessments, penetration tests, adversary simulation, Incident Response exercises, Compromise Assessments, continuous control measurements and other assessment methods, including:

- National Institute of Standard Cybersecurity Framework (First-Line Assessment);
- IT Control Set Effectiveness (Second-Line Testing); and
- Corporate Audit and Third-Party Inspections/Assessments.

#### Board considerations:

The Board reviewed the risk as part of the bi-annual Group risk review which incorporates feedback and recommendations from the Audit & Risk Committee Group risk review process. The risk has gone through an in-depth review process to address the continued upward pressure on cyber security in the current risk landscape, including regular reporting to oversight committees, immersion sessions for the Board and formal risk reviews.

During the year, the Board has also visited the Cyber Security Operations Centre in Massachusetts.

#### Impact on strategy:



#### Risk category:



- Strategic
- Operational**
- Financial
- Compliance

#### Risk trend:



Trend is increasing due to geopolitical impacts, potential threats from AI and the threat landscape.



## Significant disruption of energy

Description	Actions taken by management	
<p>There is a risk of failure to predict and respond adequately to significant energy disruption events to our assets resulting from asset failure (including third party interactions e.g. control systems protection etc.), climate change, storms, attacks or other emergency events leading to significant customer harm, lasting reputational damage with customers, regulators and politicians, material financial losses, loss of franchise or significant damage to investor confidence.</p>	<p>National Grid continues to prioritise preventative measures and response plans to address the risk of significant disruption of energy. The organisation is actively engaged in climate adaptation, conducting Group-wide assessments and planning for multi-decade adaptation to bolster resilience. These strategic actions, including various proactive preventative measures, climate adaptation plans and multi-decade adaptation, reflect the commitment to maintaining a robust energy supply system and proactively responding to the challenges posed by evolving climate patterns and emergency events.</p> <p>Proactive preventative measures:</p> <ul style="list-style-type: none"> <li>• Acceleration of proactive maintenance and asset checks ahead of winter to maximise network availability.</li> <li>• Collaboration with energy suppliers, regulators and government departments to explore wider industry mitigations aimed at maximising supply, managing demand and enhancing storage.</li> <li>• Enhancement of flood contingency plans for substations and gas/LNG sites.</li> <li>• Robust winter and summer preparedness and scenario planning.</li> <li>• Testing response plans, including proactive communication strategies covering various scenarios.</li> <li>• Implementation of US gas mains replacement programmes and a storm-hardening programme.</li> <li>• Outage planning to ensure swift response and recovery.</li> <li>• Group-wide assessment of climate vulnerabilities with no new short-term risks identified.</li> <li>• Initiation of multi-decade climate adaptation plans by all business units for inclusion in future rate cases.</li> <li>• Complementary efforts to existing resilience investments to ensure long-term preparedness.</li> </ul> <p><b>Board considerations:</b> The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit &amp; Risk Committee's Group risk review.</p>	
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li>Strategic</li> <li><b>Operational</b></li> <li>Financial</li> <li>Compliance</li> </ul>	<p><b>Risk trend:</b> Trend remains neutral</p> 



## Upstream supply

Description	Actions taken by management	
<p>There is a risk of failure to predict and respond adequately to disruptions in upstream energy supply because of energy falling short of capacity needs leading to challenges in balancing supply and customer demand, with adverse impacts on customers and/or the public, reputational damage and regulatory impacts.</p>	<p>The organisation remains vigilant to potential upstream supply issues, recognising the need for continued monitoring and adaptation should a significant issue arise. Management takes proactive preventative measures where possible and engages suppliers to monitor potential supply disruptions and build out resilience to adapt to issues that may arise.</p> <p>Proactive preventative measures:</p> <ul style="list-style-type: none"> <li>• EU storage reaching its highest-ever level at 97%, coupled with a substantial reduction in UK gas prices, creating a more favourable market position.</li> <li>• Lessons learned from last winter's storms have highlighted the upstream supply risk, prompting increased political and industry focus.</li> <li>• Proactive engagement with third-party suppliers and external stakeholders to foster better understanding and preparedness.</li> <li>• Better understanding and planned response to upstream supply challenges in the US compared with previous years.</li> <li>• Confidence in the ability to reduce gas demand if needed thorough testing of emergency preparedness.</li> </ul> <p><b>Board considerations:</b> The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit &amp; Risk Committee Group risk review and received an update on the Group's preparedness for winter, including winter outlook forecasts pertaining to markets and weather, business unit preparations, and key risks and mitigations.</p> <p>The Board also discussed the climate adaptation as a global macro challenge and considered emerging issues as part of the Climate Vulnerability Assessment and considered wildfire as a future risk in relation to climate change.</p>	
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li>Strategic</li> <li><b>Operational</b></li> <li>Financial</li> <li>Compliance</li> </ul>	<p><b>Risk trend:</b> Trend remains neutral</p> 





## Our principal risks and uncertainties continued

### Significant safety or environmental event (asset failure)



Description	Actions taken by management
<p>There is a risk of a catastrophic asset failure or bulk power system failure because of failure of a critical asset or system, substandard operational performance or inadequate maintenance, third-party damage and undetected system anomalies leading to a significant public or employee safety and/or environmental event.</p>	<p>National Grid takes proactive preventative measures including inspection and maintenance of assets. The organisation continues to apply a holistic approach to managing this risk, emphasising preventative mitigating actions to maintain asset reliability and effective response plans.</p> <p>Proactive Preventative Measures:</p> <ul style="list-style-type: none"> <li>• Acceleration of proactive maintenance and asset checks, including focus on inspection and maintenance programmes and defect management.</li> <li>• Emphasis on preparedness plans coupled with regular updates and refinement of emergency response plans and implementation of a US storm-hardening programme.</li> <li>• Robust disaster recovery and outage planning to ensure swift response and recovery.</li> <li>• Addressing issues related to over-pressurisation, leak-prone pipes and undetected system anomalies.</li> <li>• Robust incident management system to efficiently handle unforeseen events.</li> <li>• Business continuity management strategies to maintain critical operations during adverse events.</li> <li>• Continuous reinforcement of a robust and standardised process safety management system and clear identification of safety-critical assets on the asset register, ensuring a consistent risk management framework across high-hazard assets.</li> </ul> <p><b>Board considerations:</b></p> <p>The Board reviewed the risk as part of the bi-annual Group risk review which incorporates feedback and recommendations from the Safety &amp; Sustainability Committee.</p> <p>The two fatal events (one in the UK, in August 2023 and one in the US, in December 2023), which resulted in three fatalities, were discussed by the Board.</p> <p>The Safety &amp; Sustainability Committee received updates on the safety performance across the Group and considered an annual update on the significant safety or environmental event GPR. The Committee considered the decrease in the risk due to the sale of the UK Gas Transmission and Metering business during the year, the continuation of the US leak-prone pipe replacement programme and progress in the meter inspection programme.</p> <p>The Safety &amp; Sustainability Committee also received quarterly safety compliance and risk reports which included updates on the significant safety or environmental event risk.</p>
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li>Strategic</li> <li><b>Operational</b></li> <li>Financial</li> <li>Compliance</li> </ul> <p><b>Risk trend:</b></p> <p>Trend remains neutral</p> 

### Major capital programmes



Description	Actions taken by management
<p>There is a risk that we are unable to deliver on our major capital project programme within the required timeframes because of misalignment or lack of clarity with regulatory expectations, unclear financial frameworks to incentivise investment, complex planning requirements, external impacts on supply chain or a failure to demonstrate clear, long-term economic benefits to communities leading to increased costs, compromised quality, reputational damage and detrimentally impacting our ability to deliver our clean energy transition strategy.</p>	<p>The organisation has conducted extensive reviews to consider the maturity of risk management and mitigations over capital programmes and initiated Group-wide development of our control frameworks to keep pace with our growing capital portfolio.</p> <p>Proactive Preventative Measures:</p> <ul style="list-style-type: none"> <li>• Establishing consistency among business units on the management and assessment of project risks and controls.</li> <li>• Defining and establishing minimum core processes and controls expected for each business unit.</li> <li>• Defining regulatory frameworks with Ofgem and finalisation of contracts, and the agreement of funding for the first two ASTI projects.</li> <li>• Establishment of the Strategic Infrastructure business unit to build out internal control frameworks across our major projects, with particular focus on delivery of the ASTI capital programme.</li> <li>• Formalisation of a Major Projects Forum to bring all Project Management Office (PMO) and key stakeholders together to align best practices and risk management efforts across the Group.</li> <li>• Introduction of the Portfolio Project Management Office (PPMO) as a core function of the Strategic Infrastructure business unit to manage and oversee all risks, safety and management of change and project management processes.</li> </ul> <p><b>Board considerations:</b></p> <p>The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit &amp; Risk Committee Group risk review. The Finance Committee and the Board discussed and reviewed the higher cost of capital and increased labour and supply chain costs as a result of inflation, increased interest rates, the effect of the macro environment and the increased investment required to deliver the UK's energy transition. The Board was also kept updated on the progress of major capital projects including a deep dive with the Strategic Infrastructure business unit in relation to the ASTI projects.</p>
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li>Strategic</li> <li><b>Operational</b></li> <li>Financial</li> <li>Compliance</li> </ul> <p><b>Risk trend:</b></p> <p>Trend remains neutral</p> 

## Strategic risks

### Satisfactory regulatory outcomes

Description	Actions taken by management
<p>There is a risk that we fail to influence future energy policies and secure satisfactory regulatory agreements because of lack of insight or unsuccessful negotiations leading to poor regulatory outcomes, energy policies that negatively impact our operations, impacts on market prices, reduced financial performance, fines/penalties, increased costs to remain compliant and/or reputational damage.</p>	<p>We continue to maintain a strong understanding of the UK and US regulatory agenda and emerging issues through our approach to horizon scanning and monitoring. With consideration of the ever-increasing scale of change, we have plans and governance structures in place to address key regulatory proceedings such as UK price controls and US rate case filings, and take a proactive approach to regulatory reform where appropriate.</p> <p>Proactive Preventative Measures:</p> <ul style="list-style-type: none"> <li>• Maintaining active dialogue with NYPSC, MADPU and Ofgem, resulting in: <ul style="list-style-type: none"> <li>– good progress on the ASTI framework and initial positions for RIIO-T3, and</li> <li>– positive settlements on recent US rate cases and upcoming rate cases progressing well.</li> </ul> </li> <li>• Active monitoring of concurrent regulatory reforms being pursued by respective regulators.</li> </ul> <p><b>Board considerations:</b></p> <p>The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit &amp; Risk Committee Group risk review. The Board received an update on the work capabilities and future focus of the Group's strategy and regulation function. The Board also received updates from the Chief Executive on key regulatory matters at each Board meeting.</p> <p>Key areas of discussion during the year included Ofgem's consultation on the RIIO-T3 methodologies for electricity transmission and gas transmission sectors.</p>
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li><b>Strategic</b></li> <li>Operational</li> <li>Financial</li> <li>Compliance</li> </ul>
	<p><b>Risk trend:</b></p> <p>Trend remains neutral</p> 

### Climate change mitigation

Description	Actions taken by management
<p>There is a risk that we fail to identify and/or deliver upon the actions necessary to meet our climate change targets and enable the wider energy transition because of poor management of threats and opportunities associated with mitigating climate change, leading to legal risks of greenwashing or reputational impacts of not meeting our climate change targets, which include:</p> <p>(i) to reduce absolute Scope 1 and Scope 2 greenhouse gas emissions from a 2018/19 baseline by 60%, by 2030/31 and absolute Scope 3 emissions from the same baseline by 37.5%, by 2033/34; and</p> <p>(ii) in the longer-term reach net zero by 2050, or play our part in supporting economy-wide decarbonisation in the United Kingdom and northeastern United States.</p>	<p>We continue to monitor the actual and potential impacts of climate change and implement risk management strategies to mitigate these risks as part of the energy transition.</p> <p>Proactive Preventative Measures:</p> <ul style="list-style-type: none"> <li>• Setting near-term climate targets to align with the SBTi's 1.5°C pathway.</li> <li>• Governance processes aligned to endeavour to ensure that emissions reduction strategy, policy, advocacy and external messaging is integrated throughout our business, and embedded into financial planning processes and performance management.</li> <li>• Updated Climate Transition Plan to include revised pathways and details on the dependencies, policies and regulation that are key to achieving our targets.</li> <li>• Reporting on progress against our targets including how we are addressing dependencies and policy and regulation to support progress.</li> <li>• Environmental, Social and Governance (ESG) disclosure strategy aligned to external expectations and requirements.</li> <li>• Targeted action plans to improve key ESG scores and proactive engagement with investors on steps we are taking to improve ESG performance.</li> </ul> <p><b>Board considerations:</b></p> <p>The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Safety &amp; Sustainability Committee. In addition, the Board discussed the adoption of the 1.5°C aligned near-term emissions targets and considered the opportunities and risks of setting new targets. In September 2023, a joint session was held between the Safety &amp; Sustainability Committee and the Audit &amp; Risk Committee to discuss the ESG reporting landscape and the Group's ESG reporting assurance strategy including the risk of misreporting.</p>
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li><b>Strategic</b></li> <li>Operational</li> <li>Financial</li> <li>Compliance</li> </ul>
	<p><b>Risk trend:</b></p> <p>Trend remains neutral</p> 

## Our principal risks and uncertainties continued

### Political and societal expectations

#### Description

There is a risk that we do not position ourselves appropriately to political and societal expectations because of a failure to proactively monitor the landscape or to anticipate and respond to changes leading to reputational damage, political intervention, threats to the Group's licences to operate and our ability to achieve our objectives.

#### Impact on strategy:



#### Risk category:

- Strategic
- Operational
- Financial
- Compliance

#### Actions taken by management

Horizon scanning processes have been implemented to monitor and positively influence perceptions of our business and our reputation. We monitor media, social and political activities on a daily, weekly and monthly basis, and take appropriate action to ensure National Grid is able to respond to the environment we operate in and the needs of customers and stakeholders.

#### Board considerations:

The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit & Risk Committee Group risk review.

The Board considered updates on the UK and US political environments, the Group's engagement with government on key policy matters, and the upcoming UK and US elections.

#### Risk trend:

Trend remains neutral



### People capability and capacity

#### Description

There is a risk that we do not have, across our workforce and within our leadership, the capability or capacity necessary to deliver on existing or future commitments because of ineffective planning for future people needs, insufficient development of people and failure to attract and retain people in a competitive market for skills and talent, leading to failure to deliver on our business goals, strategic priorities and vision to be at the heart of a clean, fair and affordable energy future.

#### Impact on strategy:



#### Risk category:

- Strategic
- Operational
- Financial
- Compliance

#### Actions taken by management

This risk has been revised and expanded to focus on the wider workforce capability and capacity risk that we expect as we continue to deliver on the energy transition. We are involved in a number of initiatives to help secure the future engineering talent we require.

#### Proactive Preventative Measures:

- To provide a competitive advantage in the marketplace, we have established:
  - advanced and higher apprenticeships in the UK and a graduate development programme across both the UK and US; and
  - industrial placements and internships in the UK and US.
- Ensuring high levels of diversity in future talent pools.
- Continued rigorous development of our succession planning and development planning processes, particularly at senior levels.
- Strategic workforce planning processes developed and implemented to enable better understanding of future workforce needs and enable training, graduate programmes, attraction and retention strategies to be aligned to forecast workforce needs.
- Building our reputation, brand and Employee Value Proposition to enable National Grid to be seen as a place to work for those wanting to be involved in the energy transition.
- A more proactive hiring process is being established.

#### Board considerations:

The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit & Risk Committee Group risk review. The People & Governance Committee considered succession planning and the talent pipeline for the Board and is updated overall on the leadership, capabilities and development across the organisation given the Group's future workforce requirements.

The Board undertook a risk review on people talent and capability, including reviewing the Group's strategic workforce plans for the near, medium and long term, and considering the Group's training needs.



#### Risk trend:

Trend is increasing in line with expected energy transition workforce needs



## Financial risks

### Financing our business

Description	Actions taken by management
<p>There is a risk that we are unable to fund our business efficiently as a result of a lack of access to a wide pool of investors, market volatility, unsatisfactory regulatory outcomes or unsatisfactory financial or operational performance of the business, leading to a lack of access to capital, impacting our ability to achieve our strategic objectives, including our proposed capital investment programme.</p>	<p>This risk is considered in conjunction with other GPRs, particularly in relation to regulatory outcomes, our major capital projects programme and the safe and reliable operation of our network businesses.</p> <p>We maintain a funding strategy and funding plan, and engage frequently with stakeholders, including credit rating agencies, banks and investors, so that we can take account of their views as we monitor and update this plan. We maintain a diverse range of funding sources and monitor our funding risk by use of both short- and long-term cash flow forecasts. These forecasts are supplemented by a financial headroom analysis used to assess funding requirements for at least a 24-month period and we maintain adequate liquidity for a continuous 12-month period. Liquidity is made up of existing cash and investments and forecast operating cash flows together with the use of committed bank facilities if required.</p> <p><b>Board considerations:</b></p> <p>The Board reviewed the risk as part of the bi-annual Group risk review, which incorporates feedback and recommendations from the Audit &amp; Risk Committee Group risk review. The Finance Committee regularly reviews and oversees key financial risks, including liquidity, refinancing and counterparty risks on behalf of the Board.</p> <p>The Board considered the risk as part of its discussions on Group financing strategy. The Board's discussions took into consideration the increase in capital expenditure forecast and the wider macroeconomic environment. A key decision made by the Board was to approve the proposed Rights Issue. Refer to page 9 for the rationale behind the proposed equity raise.</p>
<p><b>Impact on strategy:</b></p> 	<p><b>Risk category:</b></p> <ul style="list-style-type: none"> <li>Strategic</li> <li>Operational</li> <li><b>Financial</b></li> <li>Compliance</li> </ul> <p><b>Risk trend:</b></p> <p>Trend remains neutral</p> 

## Cyber security risk management and strategy

Cyber security risk is visible to and continuously monitored by our Group Executive and Board of Directors. We use the NIST CSF as the basis for identifying, assessing, measuring, monitoring, controlling and responding to cyber security risks.

Our risk management processes cover all IT and Operational Technology (OT) assets, including systems and data, whether these assets belong to the Company or third parties. Risk is assessed at multiple levels within the Company, including first line business assessment, second line independent assessment, and third line Group-level assessment by our Chief Risk Officer and Ethics, Risk & Compliance Committee (ERCC).

In addition to comprehensive internal assessment and audit programmes, we engage multiple third-party assessors, consultants, auditors and cyber security firms in support of our risk management processes. These third parties provide independent verification and validation of internal assessments, and specialised expertise for specific regulations and technologies. Third-party assessment methodologies include cyber-specific activities, such as penetration testing, compromise assessment, deep network monitoring and adversary simulation teams.

We maintain an independent Supply Chain Risk Management (SCRM) function responsible for identifying and overseeing cyber security risks associated with threats from our use of third-party service providers.

Controls implemented by SCRM include both contractual and technical measures tailored to the risk profile of the supplier, their degree of access to National Grid's systems, and the classification of data they process for National Grid.

To date, there have been no cyber security incidents that have materially affected the Company's business strategy, results of operations or financial condition. We acknowledge that the global cyber security risk environment for critical infrastructure providers is extremely challenging and dynamic.

### Cyber security governance

The Board prioritises the mitigation of cyber security risk through National Grid's ERM process. Responsibility for oversight of risk management lies with the Board and is delegated to the Audit & Risk Committee. The ERCC regularly reviews and approves the status of the risk prior to reporting to the Audit & Risk Committee. To effectively manage oversight of National Grid's cyber security risk management practices, the ERCC has primary responsibility to oversee the disclosure of material cyber security incidents, as well as the general obligation to ensure the proper risk oversight structure of cyber security as part of National Grid's overall enterprise risk management programme and the internal controls applicable to cyber security matters. National Grid's Chief Information and Digital Officer (CIDO) and Chief Information Security Officer (CISO) regularly provide reports to the Audit & Risk Committee and hold additional briefings for the Board at least once per year. The Audit & Risk Committee and Board work collaboratively to ensure oversight with the proper focus of each respective Board Committee.

These reports include, among other things, current and emerging cyber security threats to National Grid and relevant sectors, the status of key risk indicators, controls, the results of any relevant internal or external assessments, any key incidents escalated to management during the prior and current reporting period and the status of cyber improvement programmes to manage its cyber security posture.

At the executive and management level, the CIDO is the risk owner, and the CISO has primary responsibility for the development, operation and maintenance of National Grid's cyber security programme. The CISO has over 38 years of experience in Information Technology and Security, and is supported by an international team of trained cyber security, physical security, and data privacy specialists with many relevant certifications. The CISO reports directly to National Grid's Group CIDO who is a member of the Group Executive Committee. Under the CISO's oversight, National Grid's cyber security team implements and provides governance and functional oversight for cyber security services, controls and processes. Cyber security processes include escalation of certain risks and incidents, including those that originate or occur at third parties, to the CIDO, legal and other executive leaders as appropriate based on the severity of any such risk or incident.

### Emerging risks

Our framework also considers emerging risks to ensure we understand potential future material impacts on our risk profile and implement appropriate monitoring and responses to keep pace with these risks.



## Our principal risks and uncertainties continued

Our process to identify and manage emerging risks is as follows:

- Emerging Risk Reviews are conducted and reported at least bi-annually at a Group level using external insight and benchmarking.
- Group Principal Risk reviews consider relevant emerging risks and developments in the risk landscape. These are carried out at least annually.
- Business units and functions maintain Emerging Risk Radars that are considered in group reporting.
- We run a quarterly Senior Leadership Risk Network, where experts across the business meet to identify and discuss strategic emerging threats and opportunities.

Where emerging risks are identified, they are assessed in terms of potential likelihood, impact and velocity to the extent possible given that they are uncertain by nature. The assessment then drives whether the risk should be monitored, managed or considered for transition to an active risk. Our current emerging risks are considered to either have a level of inherent uncertainty or are expected to crystallise outside the period of the business plan and are therefore considered emerging on that basis.

Existing emerging risks under consideration are identified utilising scenario analysis, horizon scanning and emerging risk assessments. Assessment includes the potential impact and velocity (time to impact) and our response is to watch, monitor or manage the risks that are reported to the Board and Group using our emerging risks radar.	Emerging risk	Strategic priority impact	Velocity		
			Immediate < 3 years	Short Term 3–5 years	Medium Term 5–10 years
	Artificial intelligence (strategic disruption)		█	█	
	Geopolitical tensions (business or supply chain disruption)				█
	New tech entrants (strategy and market disruption)				█
	Quantum computing (security threats)			█	█
	Offshore grid solutions (strategy and market opportunity)		█	█	
	Wildfire* (climate adaption)			█	
	Network resilience standard (regulatory opportunity)		█		

\* We continuously monitor our short-term ERs to ensure we respond to changes in our risk assessments appropriately. We are in the process of reviewing wildfire risk and coordinating our business-wide response, but our analyses show that the physical risk is considered to be remote within our jurisdictions today.

# Viability statement

The Board's consideration of the longer-term viability of the Group is an extension of our business planning process. The process includes financial forecasting, risk 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.

As required by provision 31 of the 2018 UK Corporate Governance Code, the Board has formally assessed the prospects of the Company, and this assessment has been made over the next five financial years in line with the Company's strategic business plan. The assessment includes the potential impact (financial and reputational) of different stress testing scenarios on our GPRs which are severe but plausible and could impact the longer-term viability of the Company, our solvency and liquidity. We also consider emerging risks and select a cluster scenario to assess the potential impact of a number of our GPRs crystallising at the same time.

## Risk cluster

The impact of a cluster of the GPRs crystallising over the assessment period was also considered by analysing the interconnectivities of our GPRs to select a risk cluster and stress testing scenario that could pose the most significant threat to our viability. Our cluster scenarios modelled the financial impact of a significant cyber-attack, resulting in a significant data breach, a catastrophic asset failure in the US gas business, energy disruption, and impact on our New York gas operating licences.

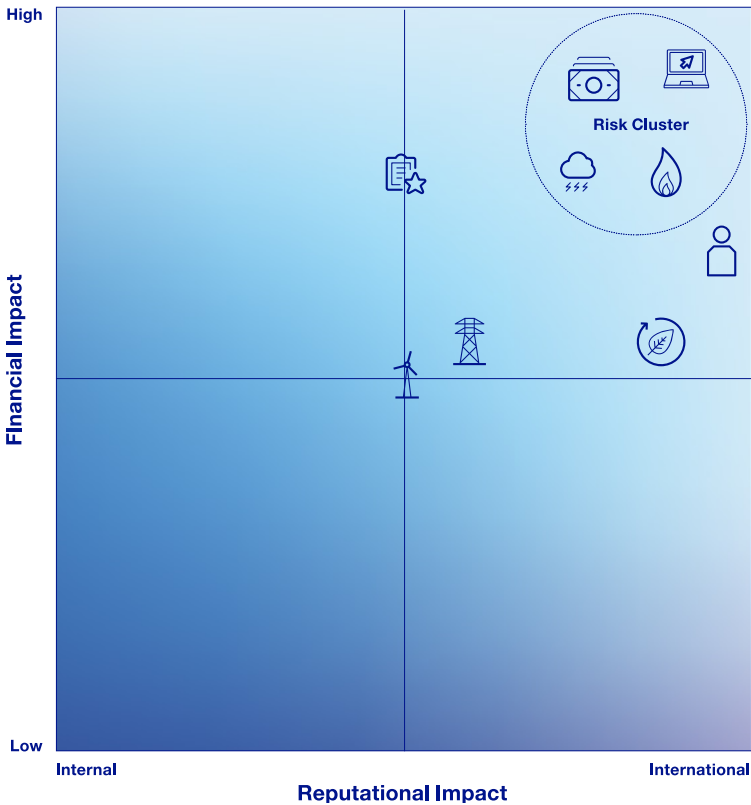
Whilst the cluster scenarios would lead to significant impacts, management would have mitigation strategies available to ensure the Company remains viable over the five-year assessment period. National Grid operates in stable markets and the robust financial position of the Group, including the ability to sell assets, raise capital and suspend or reduce the payment of dividends, provides a range of options to secure viability.

## Viability

The Directors are satisfied that they have sufficient information to judge the viability of the Company and, based on the assessment described above and on pages 22 – 30, have a reasonable expectation that the Company will be able to continue operating and meet its liabilities as they fall due in the period to May 2029.

## GPR stress testing

Each GPR was considered and, where appropriate, a stress testing scenario was identified and used to assess impacts on reputation and/or financial performance over the five-year assessment period as detailed below:



All scenarios are considered low probability events.

Icon	GPR	Extreme yet plausible scenarios
	<b>Catastrophic cyber security incident*</b>	A significant cyber attack.
	<b>Significant disruption of energy*</b>	Significant energy disruption event due to an extreme weather event in the US.
	<b>Upstream supply</b>	Significant energy disruption event occurring in the UK during winter due to limited generation supply.
	<b>Significant safety or environmental event (asset failure)*</b>	A significant process safety or gas pipeline failure in the US.
	<b>Major capital programmes</b>	Inability to either successfully secure appropriate incentive mechanisms and/or deliver our major capital projects.
	<b>Satisfactory regulatory outcomes</b>	Poor outcome of future US rate case filings, and low performance under RIIO-T3 in the UK.
	<b>Climate change mitigation</b>	Not meeting our net zero commitments or targets.
	<b>Political and societal expectations</b>	A change in federal administration in 2024 driving an even more progressive environmental/climate agenda in New York or Massachusetts.
	<b>People capability and capacity</b>	n/a
	<b>Financing our business*</b>	Financing a significant capital investment programme driven by energy transition targets in the UK and US in an environment of higher interest rates and inflation.

\* Included as part of risk cluster.

# Our business units

## 1

## UK Electricity Transmission



Dogger Bank A and B connect 1.2 GW each at Creyke Beck 400 kV Substation. The third, Dogger Bank C, will connect 1.2 GW at Lackenby Substation later this year.

### Highlights

In 2023/24, UK ET continued its strong financial and operational performance, while maintaining its focus on safety and delivering for customers. As the backbone of the UK's energy system, our network delivered one of the safest and most reliable electricity systems in the world.

Over the last year, there has been an increased focus from UK government, the regulator and industry on the role of networks in the energy transition. Against that backdrop, we have worked closely with our external stakeholders to promote policies and frameworks which accelerate the delivery of infrastructure. We have invested over £1.9 billion as part of both the expected circa £11 billion capital investment over the RIIO-T2 regulatory period (2021-26) and into the ASTI projects. We also delivered over £17 million of efficiency savings in 2023/24, leveraging opportunities provided by the acquisition of the UK ED business.

### Enable the energy transition for all

In 2023/24, the business achieved several milestones. We connected over 3 GW of energy to the network, including the first 1.2 GW phase of Dogger Bank, the world's largest offshore wind farm, and the UK's first transmission-connected solar farm, Larks Green. We also reached significant milestones on our major in-flight projects, notably the installation of overhead lines on all 116 T-pylons as part of the Hinkley Connection Project, and the final tunnelling breakthrough on our £1 billion London Power Tunnels 2 project.

In December 2022, Ofgem, under the ASTI framework, asked UK ET to deliver 17 major infrastructure projects, the first part of The Great Grid Upgrade. This is the largest overhaul of the grid in generations and will help reduce the UK's reliance on fossil fuels by connecting 50 GW of offshore wind by 2030. We have made good progress since establishing the Strategic Infrastructure business unit in April 2023. We have received development consent on our Yorkshire GREEN project and also expect to receive final funding approval from Ofgem in summer 2024 for the first of our major infrastructure projects to connect green energy, Eastern Green Link (EGL) 1 and 2. The EGL1 and 2 joint construction projects with Scottish Power Energy Networks and Scottish and Southern Electricity Networks are due to commence construction in 2024/25.

Alongside connecting green energy to the network, we remain committed to reducing our SF<sub>6</sub> emissions by 50% by 2030 from a 2018/19 baseline. Whilst we missed our 2023/24 target of keeping emissions below 9,688kg (compared to a 9,108kg target) we completed our new SF<sub>6</sub>-free substation in Littlebrook using GE's g3 technology, and have collaborated closely with suppliers and universities, successfully trialling innovative leak repair technology, enabling us to avoid outages and keep electricity flowing whilst we work. Increased availability of SF<sub>6</sub>-free technology will be critical to reducing future emissions and meeting this target.

### Deliver for our customers efficiently

We are proud to have maintained our record for world-class reliability. This is founded on prudent long-term asset management and planning and careful short-term operational and resilience decision-making. We provided around 209 TWh service to consumers, failing to supply

just over 4 MWh, which was due to factors outside our control. This was despite 13 named storms. This equates to 99.999998% reliability.

With a rapidly growing pipeline of customers looking to connect to the transmission network, our extensive engagement with Ofgem, the Department for Energy Security & Net Zero (DESNZ) and the ESO has helped drive progress on connections reform in support of the Connections Action Plan published as part of a package of Grid reforms in the UK Government's Autumn Statement. New queue management arrangements will ensure projects meet contractual milestones or face being removed to make way for connection-ready projects. Our collaborative work with distribution networks and others has released 30 GW of additional capacity, accelerated 10 GW of Battery Energy Storage Systems connections and removed 3 GW from the connections pipeline through reforms such as the TEC amnesty.

### Grow our organisational capability

We continue to collaborate more closely with our supply chain so that we can deliver our ASTI and other major projects at pace. We have established two new long-term contracting models to deliver the upgrades and new infrastructure required for the transition to renewable energy. The HVDC framework will secure our offshore supply chain, whilst the Great Grid Partnership is establishing long-term collaborative relationships with, and across, our onshore supply chain partners. Both models provide our partners with the confidence they need to invest in building the delivery capability and capacity we will need in the future.

### Empower colleagues for great performance

UK ET's combined (employee and contractor) LTIFR was 0.14 in 2023/24, comprising 0.08 for employees and 0.19 for contractors. The majority (73%) of our incidents were from our contractors, reflecting that we deliver our capital construction works through contractors, not our direct labour force. We are working with our contractors to drive through the required improvements in their performance. Behavioural safety is key to making the next step in our safety maturity and we have developed and are rolling out our behavioural safety programme, Safe Choices for All.

### Looking ahead

The UK transmission network is growing at a rate not seen for generations. The year ahead marks a crucial phase as we prepare our final submission to Ofgem for the next price control, RIIO-T3, which will be in place from 2026 to 2031. We will be working closely with Ofgem, DESNZ, ESO and others to agree a clear vision of the UK's future energy needs and the timing of network reinforcement activities, which will define when customers can connect. This will be critical to ensuring we build a future-ready transmission network that will serve society, protect the environment, and underpin economic growth for decades to come.

## 3

## UK Electricity System Operator

### Highlights

As GB's electricity system operator, we are at the heart of the energy transition, operating one of the fastest and most reliable decarbonising networks in the world. This year, despite the ongoing conflict in Ukraine, the broad European energy situation has improved. We have built further system resilience and delivered the second year of our Demand Flexibility Service, giving us valuable insight to support the future of flexibility services. We also launched the first phase of our Open Balancing Platform, which will revolutionise the balancing mechanism in support of net zero by further diversifying generation assets used by our control room.

## 2

## UK Electricity Distribution (UK ED)



Engineers carrying out routine post-storm maintenance checks to ensure customers receive an uninterrupted service.

### Highlights

With an ambitious five-year plan, the start of RIIO-ED2 has led the business into an exciting new phase of capital delivery. In the first year of the price control we are on track to deliver our £7.5 billion investment programme.

Working with the ESO, Ofgem and the UK Government, we announced plans to release 10 GW of capacity in our network enabling customers to connect quicker than previously planned. This is part of our work with the Energy Networks Association to find innovative solutions to speed up the connection of low-carbon technologies (LCTs).

Our network navigated through a challenging weather year, with 13 named storms, a notable increase compared to an average of six storms over the past five years. During the four largest storms impacting our region, over 126,000 customers lost power to their homes and businesses. With the prompt deployment of field resources, including a fleet of five helicopters, we were able to restore a majority of customers within 24 hours. Despite our storm response efforts, being termed as outstanding by Ofgem, the customer outages negatively impacted our incentive performance which is a clear reflection of more challenging targets in RIIO-ED2. Our Community Matters Fund was increased from £3.8 million to £6 million for the year ended 31 March 2024, with £5 million to tackle fuel poverty. We won an award for best customer centric strategy at the 2023 Engage Awards for our customer engagement and support of vulnerable customers.

Our LTIFR remained low at 0.098 against our Group target of less than 0.10, but tragically, in August 2023, a fatality occurred in Ludlow, Shropshire, where a colleague from our UK ED team fell from height during overhead line work. This event deeply impacted our entire organisation, reinforcing our unwavering commitment to ensuring every employee's safety. We continue to cooperate with the ongoing Health and Safety Executive investigation.

The organisation has also continued to work at pace and cross-industry towards long-term reforms to the connections process, to unblock the queue and pave the way for investment – ensuring the grid is ready to take on the next electric industrial revolution.

### Looking ahead

Following the passage of the Energy Act in 2023, it is expected the ESO will be separated from the Group in the second half of calendar year 2024, to form NESO. Previously denoted as the Future System Operator, NESO will be an independent, public corporation with responsibility for planning Britain's electricity and gas networks and operating the electricity system. The new organisation will be founded on the current activities and capabilities of the ESO, but will also take on new roles with a whole system perspective across energy sectors. It will play a central role along with other key stakeholders in ensuring that Britain's energy system is secure and affordable, as well as forging the path to a sustainable future for everyone.

### Enable the energy transition for all

We are committed to delivering low-cost energy transition and in the current year we focused on improving our flexibility service offerings through our Market Gateway Platform, resulting in over £80 million of reinforcement work being deferred, delivering customer savings.

In addition to the existing sources of flexibility, we have been investigating the potential for customers to flex their power requirements for heat pumps with our EQUINOX project, an innovative heat pump flexibility trial. Our first successful trials won the Heat Pump Project of the year award at the 2023 H&V News Awards. Building on this, we have now expanded the trial by enrolling over 1,000 customers in the next phase of testing.

As part of our pledge to promote net zero in communities we serve, a school in Gloucestershire has become the first to install solar panels with funding from us.

### Deliver for our customers efficiently

Our network reliability is at 99.99261%. We have continued to digitalise the connection journey for our customers, extending our programme to other LCTs after a successful implementation of our self-serve online tool for EV charger applications last year. We made over 80,000 LCT connections during the year, with 89% of direct enquiries approved on the same day. We have implemented changes to our licence through the Network Access Significant Code Review, which therefore socialises more of the reinforcement costs facilitating cheaper connection of LCTs.

### Grow our organisational capability

We have mobilised our new operating model, building on the strength of our local delivery expertise through introduction of critical central planning functions of Customer Excellence, DSO, Connections and Asset Management. This will ensure we are well placed to meet the predicted changes in requirements and increase in customer demand. As part of this, we have introduced an independent DSO Panel, which is substantial progress on our commitments to enable efficient and transparent governance within our functionally separate DSO. The panel is made up of industry experts representing a broad range of stakeholder views, to strategically scrutinise the DSO outputs.

### Empower colleagues for great performance

We have broadened our leadership development interventions, through the introduction of leadership programmes and mobilisation of digital coaching to enhance leadership capability. As a result, the 2024 Grid:voice survey saw an increased Leadership Index score of 75%. We have also continued to focus on our 'Safe to Say' initiative launched last year. This includes improving the number of channels through which employees can be empowered to flag concerns and offer ideas. As a result, we have observed a notable 11% increase in our scores over the past two surveys.

### Looking ahead

We will work to actively drive the nation's move to decarbonisation. Through targeted green investment, widespread rollout of flexibility services and development of new products and digitalised solutions we will look to unlock the network capacity our customers need in order to adopt LCTs at scale. We will aim to prepare our network for over a million electric vehicles during RIIO-ED2, around 300,000 heat pumps, and a significant increase in renewable energy, whilst making it quicker and easier for our growing customer base to connect to the network. We will need to continue to collaborate with our regional stakeholders to enable them to achieve their aspirations, helping them build local energy action plans and we will continue to empower our people to deliver safe, effective and efficient performance for customers through our Integration Synergy and Efficient Work programmes.



## 4 New England



US field force working on the local electricity system, delivering the investment required across the distribution network.

### Highlights

We continue to be at the heart of a clean, fair, and affordable energy future for our over 2 million customers in Massachusetts. We invested over \$2 billion in our energy infrastructure over the last year and have ambitious plans to continue investing in our networks to meet customer needs.

In support of these plans, in November 2023 we filed a five-year rate proposal with the MADPU for our Massachusetts Electricity Distribution business. Approval of this proposal will help ensure that we continue to deliver safe, reliable service to our customers. It will also enable us to deliver the state's climate goals, strengthen relationships, and continue building trust with key stakeholders and third-party advocates.

### Enable the energy transition for all

In January 2024, we submitted our ESMP – also referred to as the Future Grid Plan – to the MADPU outlining the critical investments needed in the local electric distribution system over the next 5 – 10 years to help meet the state's nation-leading climate change, clean energy and equity goals set out in the state's 2050 Clean Energy and Climate Plan. The proposed anticipatory investments are foundational to meeting electric demand that is projected to more than double by 2050. The plan outlines a path to upgrade and expand the capacity of the electric distribution grid, accelerate the connection of renewables, and empower smart customer choices.

We continued to expand our grid modernisation investments in the network, with 20% of customers now covered by Fault Location Isolation and Service Restoration (FLISR) capability enabling self-healing networks and improved reliability. We also connected over 200 MW of distributed energy resources and supported the installation of 6.5 MW of EV charging over the last year.

In 2023, we replaced a further 130 miles (209 kilometres) of older leak-prone metal pipe in favour of new, plastic pipe to improve the safety of the gas delivery network, and reduce the amount of methane escaping the system.

In 2023, aligned with our Gas System Enhancement Plan, we continued to scale our use of low-dig technology (CISBOT) to repair 814 leaks and reduce GHG emissions.

### Deliver for our customers efficiently

As part of our Group-wide efficiency programme, the New England business delivered £120 million of savings, with £31 million in 2023/24.

In 2023/24, we dealt with a number of storms, including the 18 December 2023 event, with more than 187,000 customers out, and a restoration time of 47 hours for 95% of our customers out at peak.

On the gas side of the business, we continue to maintain our leak response times.

In 2023/24, the Gas Business Enablement programme deployed new technology to enable digital workforce management, asset management, and construction work management capabilities across Massachusetts. This reduces paper and manual work and enables better decision-making in asset investments.

With the initiation of the Rapid Results Office within the US Customer Organization, we have focused on improving customer experience by inviting all colleagues to engage with a 'Find It & Fix It' process. We launched new ways for our customers to seamlessly pay their bill through four popular pay services.

### Grow our organisational capability

Our LTIFR was 0.083 against a Group target of less than 0.10.

Launched in spring 2023, our state-wide Strategic Workforce Development Program partners with educational institutions and non-profit organisations to provide trainees from historically under-represented groups with career exposure, development and employment opportunities within National Grid and the greater clean energy industry through our suite of four clean energy academies. We have hired almost 70 graduates of our programmes who are now working across the business.

### Empower colleagues for great performance

Colleagues in the region surpassed our yearly Grid for Good goal with nearly 19,000 volunteer hours in 2023/24, which delivers a positive impact and builds engagement with the communities we serve.

We donated nearly \$500,000 to three branches of the United Way and the Good Neighbor Energy Fund to help our customers. This significant donation is supplemental to our Customer Savings Events, where customers meet with National Grid representatives in-person to find out about opportunities to reduce energy use, sign up for balanced billing options, and check if they qualify for energy bill discounts.

Our top priority is to ensure our colleagues return home from work in the same condition in which they arrived. Sadly, in December 2023, a colleague and a police officer assigned to support our worksite, died from injuries sustained after being struck by a vehicle driven by a member of the public in Waltham, Massachusetts. We recognise the exceptional aspects of this traumatic incident, which was out of our control, but offered support through our Employee Assistance Programme and with in-person memorial events that recognised the outstanding contribution of these two individuals and the heroic efforts of the three surviving crew members.

### Looking ahead

We continue to deploy FLISR technology to improve reliability. By 2030, the proposed ESMP investments will facilitate up to 492,000 additional EVs; support an incremental 1 GW; enable up to 84,000 additional electric heat pumps; and; create almost 4,000 new jobs and \$0.5 billion incremental economic activity. In our gas business, we plan to continue our progress in our Leak-Prone Pipe replacement programme, increasing our use of low-dig technologies like CISBOT, while progressing our learnings in Integrated Energy Planning.

## 5

## New York



During our Project C Week of Service, more than 2,000 company employee volunteers engaged in 200 events taking place across New York.

## Highlights

Our New York business continues to perform well and achieve positive growth in its service to more than 4 million customers. As we progress toward a smarter, stronger, cleaner energy network, decarbonising our networks remains a priority for our New York business. In April, we filed a Joint Proposal with New York Public Service Commission (NYPSC) staff for a three-year rate settlement for our downstate gas distribution businesses, KEDNY and KEDLI. This will fund investment that will significantly reduce system leaks and associated emissions.

### Enable the energy transition for all

In 2023, we awarded \$11.4 million in economic development funds to support projects across Western New York, including the construction of the first North American facility that will produce clean, carbon-free hydrogen. Funds will also support an on-site lithium battery storage device, providing a greener backup power alternative for the Buffalo Niagara Medical Campus.

We have facilitated over a dozen customer requests to produce and interconnect about 10 million dekatherms per year of RNG. This amount of RNG would be equivalent to meeting the annual demand of approximately 80,000 homes in the northeast that use natural gas for heating or displacing nearly 53,000 metric tonnes of CO<sub>2</sub> emissions.

Across our New York business, we continued with gas safety and reliability investments including the replacement of approximately 206 miles (332 kilometres) of leak prone pipe in calendar year 2023.

### Deliver for our customers efficiently

As part of our Group-wide efficiency programme, the New York business delivered £177 million of savings over the last three years, with £48 million reached in 2023/24. This has helped reduce cost pressures on our customers for over three years.

During the year, New York Electric Operations prepared 49 times for storms and severe weather, including 13 major storm events. Where our service territories have been impacted by storm activity this year, we achieved an electricity restoration rate of 95% for our customers within 12 hours, which was a total of around 1.4 million customers.

Our safety-first culture is assisted by cutting edge technology. Urbint, an AI-powered tool is deployed on our gas pipeline and LNG construction projects. This tool gives us the ability to assess field activities, identify hazards and direct controls. Many of our Gas Complex Construction Supervisors work with Urbint to calibrate the application's risk engine and safety science, ensuring it is easier for supervisors in the field to identify hazards and where to focus their time, reducing the amount of time they spend filling out daily inspection reports.

Recently, the New York and New England Gas Complex Capital Construction teams had the distinct honour of receiving the Research and Innovation Award at the American Gas Association Operations Conference. National Grid won this award for pioneering the use of science to assess risk and enhance safety.

In March 2024, the NYPSC approved a \$1.7 million financial settlement for enhanced safety measures and training at the Greenpoint liquid natural gas (LNG) facility in Brooklyn following a gas incident in 2022. At National Grid, we maintain rigorous safety protocols for all facilities serving our customers, communities, and employees. This settlement reinforces our commitment to continuous improvement when it comes to health and safety.

### Grow our organisational capability

Our LTIFR was 0.054 against a Group target of less than 0.10.

Our New York Future of Electric Networks plan includes enabling over 4,000 EV charging ports, connecting 190+ MW of incremental DER and developing and starting plan implementation to streamline this, local sourcing requirement and EV interconnection processes.

We are working in partnership with the US Department of Defense to provide career training for members of the armed forces transitioning from active military service, we made our first hire, a former Navy submarine officer.

We hosted a second Gas Decarbonization Summit to discuss opportunities and challenges that come with transforming the US gas business and deliver on our clean energy ambitions.

### Empower colleagues for great performance

National Grid's Project C community commitment initiative marked its third year by expanding the Company's annual day of service to a week. More than 2,000 company employee volunteers engaged in 200 events across New York. Since launching Project C in September 2021, National Grid has supported 100,000 local businesses, launched 1,000 community partnerships, planted or donated 2,300 trees, adopted 60 parks, and trained 3,400 workers to grow the clean energy workforce. Additionally, employees have volunteered more than 28,000 hours in their New York communities.

## Looking ahead

We plan to invest approximately \$4 billion to transform our energy delivery system and propel economic growth across Upstate New York, over the next six years. The Upstate Upgrade is a collection of transmission enhancement projects to deliver a smarter, stronger, cleaner energy grid to support a more resilient energy network. We are embarking on more than 70 projects through 2030 that will generate thousands of new jobs and more than a billion dollars in additional economic growth, while ensuring the energy grid is able to meet customers' growing demand for electricity. We will construct or rebuild more than 1,000 miles of transmission line, 45 substations and install new technologies that prevent load loss, monitor load fluctuations and resolve congestion. Additionally, this upgrade will protect the transmission grid against the increasing threat of extreme weather.

We are transforming our electric networks with more reliable and resilient energy solutions to meet state climate goals and reduce GHG emissions by keeping affordability, equity and ease of doing business at the forefront, and providing our customers with more choice and control over their energy usage. We remain on track to file new rates for NIMO before summer this calendar year.

## 6 National Grid Ventures



The CAP 25 project at Grain LNG, the Isle of Grain terminal in Kent, will enable the site to continue to play its critical role in energy security.

### Highlights

NGV is focused on competitive markets and operates a broad mix of energy assets and businesses in the UK and US. Its portfolio includes electricity interconnectors, competitive transmission, wind and solar power generation, LNG storage and regasification, battery storage, and conventional generation. The businesses continued to perform well in 2023/24, with improved operational availability and a number of newly commissioned assets in our interconnector and LNG businesses.

In the UK, Viking Link, a 475 mile (765 kilometre) interconnector between the UK and Denmark came online in December with capacity to supply green energy for up to 2.5 million UK homes. We now currently have six interconnectors in operation, with a capacity of 7.8 GW connecting the UK with France, the Netherlands, Belgium, Denmark, and Norway. Overall, availability has increased following IFA1's return to service and improved availability on NSL. Our BritNed and NEMO interconnectors have performed well with availability reaching 98.3% and 96.8% respectively. IFA2 strong auctions results helped to offset lower availability of 71.2% following a cable fault outage and in its second full year of operation, NSL has performed well at full operational capacity, and availability of 95.9% across the year.

In the US, in May 2023 we commissioned our new Fields Point Liquefier at our Providence LNG facility, expanding its operating capacity to serve customers across Massachusetts.

Community Offshore Wind continues to work with key stakeholders in New York and New Jersey to develop offshore wind by responding to ongoing solicitations. In October 2023, Community Offshore Wind and two other developers received provisional awards with offtake contracts in New York. In April 2024, the New York State Energy Research and Development Authority (NYSERDA) announced that no final awards would be made to the provisional awardees of New York's third offshore wind solicitation due to an inability of developers to agree to contract terms with their manufacturing partners. The New York Governor subsequently announced a path forward for New York's offshore wind industry, including a supportive manufacturing and logistics Request for Proposals to grow the domestic supply chain in New York and a Request for Information to inform future development for the state's fifth offshore wind solicitation.

### Enable the energy transition for all

National Grid Renewables took final investment decisions on an additional 642 MW of solar developments in the year and have begun construction on a number of new solar projects including the Unbridled project in Kentucky, and Wild Springs project in South Dakota. In Ohio, the Amazon Yellowbud solar farm commenced commercial operation. In June 2023, NGV's joint venture NY Transco's Propel NY Energy electric transmission project was selected by the NYISO to help connect the future expansion of offshore wind capacity to the transmission network.

In 2022, Ofgem opened an Offshore Hybrid Assets (OHA) pilot seeking to work with selected developers on establishing an investible regime. The two projects in the Ofgem OHA pilot are LionLink and Nautilus, both NGV projects. In 2023, Ofgem granted a 'minded-to-approve' decision for LionLink, but Nautilus did not receive a 'minded-to-approve' decision, with one of the main reasons cited by Ofgem being high estimated constraint costs associated with the project. NGV continues to work with its partners to address Ofgem's concerns and agree to a new OHA framework. We expect Ofgem to make a final decision on LionLink, Nautilus and the OHA regime parameters in the second half of calendar year 2024.

### Deliver for our customers efficiently

In the UK, Grain LNG's CAP 25 project is expanding capacity and enhancing infrastructure, enabling it to supply up to 33% of UK gas demand. The new storage tank with capacity of 190,000 m<sup>3</sup> achieved significant milestones throughout 2023 and has created more than 800 jobs during construction. In February 2024, Grain LNG announced additional capacity agreements with Sonatrach and Venture Global.

### Grow our organisational capability

Our LTIFR was 0.199 against a Group target of less than 0.10.

NGV continues to develop its workforce and business via new technology, capabilities and skills, increasing our headcount from 1,140 to 1,548 with expansion of its operational footprint, in addition to incorporating National Grid Renewables into the overall headcount.

### Empower colleagues for great performance

NGV encourages everyone to speak out about safety, with an emphasis on reporting at all levels. In the latest Grid:voice survey, 93% of colleagues said their manager encourages them to talk openly about safety. In 2023, NGV launched a series of wellbeing events. Grain LNG is leading the way in external advocacy of mental health and wellbeing matters. National Grid Renewables received recognition for its excellence in workplace safety and health during the 2023 Minnesota Safety and Health Conference.

### Looking ahead

Going forward, NGV will focus on interconnectors, including offshore hybrid assets, in the UK, and competitive electricity transmission projects in the US.

As part of evolving our strategy to focus on networks and streamlining our business on 23 May 2024, we will be announcing the sale of Grain LNG and National Grid Renewables.

## 7 Other activities

### Highlights

Other activities primarily relate to National Grid Partners, the corporate investment and innovation arm of National Grid, as well as UK property, insurance and corporate activities. In UK Land and Property, we continue to make good progress with the divestment of the surplus property portfolio. In this fiscal year, we completed the sale of 30 sites and delivered £30 million profit.

In 2023/24, National Grid Partners invested more than \$50 million in start-ups, including four new portfolio companies and 12 follow-on rounds. It now invests in 46 companies and four limited partner investments in strategic venture funds.



# Our commitment to being a responsible business

**Our first Responsible Business Charter (RBC) was launched over three years ago. In September 2023, we refreshed our RBC to ensure we remain focused on the topics that are material to us and our stakeholders, keep pace with the external market and align to our portfolio so we can deliver on our commitments.**

## Defining our ESG material topics

Materiality is a principle that helps determine which responsible business issues are material to our business and essential for us to embed in our strategy. It is these material topics that we have embedded into our RBC and what we report on annually through our Responsible Business Report (RBR). Through this process, we can ensure that the issues we report on are significant, relevant to our stakeholders and that our reporting reflects their relative priority.

Our last full ESG materiality assessment was completed in December 2022 in accordance with the Global Reporting Initiative's (GRI) 2021 standard on materiality (GRI3). This assessment was performed on a double materiality basis (assessing materiality from both an impact and financial perspective) and followed a three-stage process where we:

- 1. Defined** our material topics with our stakeholders to gather perspectives and assess both the positive and negative impacts on the economy, environment, people and human rights;
- 2. Assessed** the importance and prioritisation of each ESG topic; and
- 3. Validated and confirmed** the results with senior management and subject matter experts to inform our sustainability reporting process.

The table on the right shows our top six material topics and how they align to our RBC commitments. Further insight into our materiality process can be found in our RBR which will be published in due course.

## Our Responsible Business Charter

Our RBC outlines our commitments to responsible business across three pillars; our environment, our customers and communities and our people. These pillars are built on our responsible business fundamentals, which include governance and activities that are essential to our business every day.



1	1	<b>GHG emissions</b> Achieve net zero by 2050.
2	2	<b>Decarbonisation and clean energy transition</b> Investing in the decarbonisation of the future of energy to achieve net zero by 2050 for Scope 1, 2 and 3 emissions.
3	1	<b>Affordability</b> Support an affordable energy transition – report on the benefits provided as a direct result of our community support, including financial assistance, advice and energy efficiency.
4	3	<b>Natural capital and biodiversity</b> Restore the natural environment by 10% on the land we manage in the UK and preserve the natural environment in the land we manage in the US.
5	1	<b>Network reliability</b> To safely, reliably and efficiently connect millions of people to the energy they use.
6	1	<b>DEI</b> Create an inclusive culture, where it is safe to speak up and where our colleagues' voices are heard and understood.





Our environment

**11.8%**

**Reduction in Scope 1 and 2 emissions against our baseline**

**0.8%**

**Increase in Scope 3 emissions against our baseline**

**24.7%**

**Reduction in SF<sub>6</sub> against our baseline**

While continuing to manage our environmental performance responsibly, we have recognised the need to transition to a clean energy system, to achieve net zero by 2050 for our Scope 1, 2 and 3 emissions, and continue to improve the biodiversity of land that we own.

This year, we have refreshed our Climate Transition Plan (CTP) to incorporate our revised near-term greenhouse gas (GHG) emissions reduction targets that align with the 1.5°C pathway in our RBC and the publication of the UK Government's Transition Plan Taskforce (TPT) disclosure guidance released in October 2023. (See page 46).

Our environmental data for this year shows a 11.8% reduction against our baseline in our Scope 1 and 2 emissions from power generation and electricity network losses as we continue to decarbonise our network. Our value chain Scope 3 emissions have increased by 0.8% against our baseline.

The increase against our Scope 3 emissions and our SBTi target is principally driven by emissions linked to our higher annual spend in relation to purchased goods and services (including capital investment) within our supply chain, with the bulk of these emissions coming from resource-intensive activities associated with constructing new energy infrastructure.

We have reduced SF<sub>6</sub> emissions caused by leaks from our equipment by 24.7% against our baseline and have continued to focus on the development of alternative gases to SF<sub>6</sub>.

**We aim to protect our natural environment.** In our UK Electricity Transmission business, we achieved a 3.2% improvement in environmental value resulting in a 7.8% overall improvement on our baseline.

In the US, we focus on preservation of natural lands that we own and manage rather than restoration. We have implemented various initiatives to achieve this, including the protection of rare, threatened, and endangered species, habitat preservation, and integrated vegetation management efforts.

**We are investing in the decarbonisation of the future of energy.** We have delivered another record year of capital investment, we also reached a higher proportion of green capital expenditure. In 2023/24 around 78% (£6.0 billion) of our Group's capital expenditure aligned with EU Taxonomy principles for sustainable investment, compared to 75% (£5.6 billion) in the previous year.

These infrastructure investments support our network jurisdictions in achieving net zero goals and we remain to track on meet and exceed £32 billion of green capital investment over the period 2021/22 to 2025/26.

**We are adapting to a changing climate** Our approach to climate resilience, and addressing risks arising from global warming impacts, is outlined in our Taskforce for Climate-related Financial Disclosure (TCFD) on pages 44 – 58.

**We continue to use resources responsibly.** Internally we have developed a water quality standard and received a positive B-score from our CDP water disclosure. Our water consumption relates almost entirely to use for generation cooling purposes and abstracted water is not altered other than being slightly warmed by the process. This year, 1,139 million cubic metres were withdrawn.

While we do not have a specific target for waste generated, we do, however, ensure waste is disposed of with appropriate environmental permits and compliant with regulatory standards.



Further details on our progress against our environmental commitments can be found in our 2023/24 RBR and CTP which will be published in due course.

In April 2023, we launched The Great Grid Upgrade national campaign.



**Our customers  
and communities**

**18,907**

**People provided with meaningful skill development**

**77,918**

**Number of colleague volunteering hours**

While we work to achieve net zero and deliver a clean and affordable energy system, we must also work to deliver that fairly, equitably and 'justly'. We must do this while still considering our role in developing, operating and maintaining critical national infrastructure.

Being a responsible business means easing the pressure on our customers and communities through activities such as mobilising hardship funds and energy efficiency measures that deliver real benefits to households. In the UK and US, this year, with the support of our charity partners, we continued to provide financial support to those severely affected by rising energy costs through our Energy Support Fund. This winter, our UK partners received £19.7 million, while our US partners received \$1.8 million to help some of the hardest hit households.

**We continue to promote social mobility in the communities we serve,** with a focus on those with lower incomes. We have developed new and longstanding partnerships with registered charities, not for profit organisations, social enterprises, educators, and our supply chain. These collaborations aim to develop the future workforce that will drive the energy transition. We provide access to skills development, employability programmes and STEM education to create a more diverse range of employability opportunities across our sector. Through these initiatives, we aim to accelerate social mobility in the communities we serve.

In the UK, Grid for Good, is a community investment programme that aims to connect young people, between the ages of 16-25, with upskilling and job opportunities in the energy industry. In the US, we work with communities through Grid for Good and Project C, a community investment programme which aims to inspire positive change and create a positive impact on neighbourhoods and communities in New York. As of 31 March 2024, 18,907 people have been positively impacted through these two programmes.

We provide opportunities for our employees to engage directly in our communities through volunteering, working with many partner organisations to make a difference.

**Our colleagues have volunteered 77,918 hours** supporting many great causes.

**We exist to serve our customers and communities** with the energy they need for life. We continue to work with regulators to reduce the impact on customer bills and act on feedback we receive to improve customer service to ensure we provide a safe, reliable and affordable service that will enable a good customer experience. This year, our customer satisfaction scores are generally positive, however our Trust Advice score dropped to 55.8%, just below our target of 56.7%. We recognise the need for further support in the US, particularly for customers facing higher energy bills.



Further details on our progress against our customers and communities' commitments can be found in our 2023/24 RBR which will be published in due course.

US customer engagement.





**Our people**

**17.6%**

**Ethnic diversity of our management population**

**90%**

**feel respected by their managers**

We continue to ensure our people are kept safe and healthy, and that work conditions meet their expectations. We are stepping up our efforts in relation to diversity and inclusion – focusing on fairness in pay and opportunity, transparency and training.

As our workforce increases, **we need to invest in our people and build the skills needed to deliver on our clean energy future** and help our employees to learn and grow with us so we can tackle the challenges ahead.

Our global technical training programmes are delivered in the UK and US, at one of our nine training centres. This year, our colleagues completed 1,607,512 training hours – approximately 7 training days per employee.

**Our continued vision is to build and develop an inclusive culture and a diverse workforce.** We have invested in HR technology, implementing a strategic sourcing structure to drive proactive sourcing, creating a best-in-industry candidate experience and creating recruitment practices that drive diversity, equity and inclusion (DEI) outcomes that reflect the customers and communities we serve.

**We continue to create an inclusive culture, where it is safe to speak up and where our colleagues’ voices are heard and understood.** Our employee engagement survey, Grid:voice, serves as our primary tool for gauging colleague inclusion. This year we are encouraged to see that 90% of colleagues who responded feel they are treated with respect by their manager, (this is 2% more than general industry norm), 80% feel they are able to be themselves at work, 78% feel like they belong at National Grid and 71% feel where they work it is Safe to Say what they think.

To support the creation of an inclusive culture, we provide a global DEI curriculum to actively engage all people managers, offering a range of monthly educational opportunities. In 2024, we provided 834 hours of DEI learning, conducting 33 instructor-led classes covering 7 diverse topics, and trained a total of 556 attendees across the organisation.

In addition, our Employee Resource Groups (ERGs) play a vital role in creating a sense of community, fostering an inclusive environment where individuals can be their authentic selves.

**We aim to lead the industry on colleague health and wellbeing.**

Being a responsible business is about prioritising and managing the health and wellbeing of our people. In 2023, we launched our Thriving Together Ambition which provides a framework for creating a thriving work environment across our organisation. The aim is to empower our colleagues to prioritise their health

and wellbeing through healthy habits and by accessing available resources when needed. By doing so, we can foster an environment where we all thrive together.

**We ensure all colleagues receive fair and equitable pay, regardless of location, gender, ethnicity or disability.**

We review gender and ethnicity pay gaps annually. In the UK, we remain an accredited Living Wage Foundation employer demonstrating that we go beyond the Living Wage requirements, this commitment extends to our contractors. We also provide a range of competitive benefits to our colleagues, including shared parental arrangements that go beyond statutory minimums.

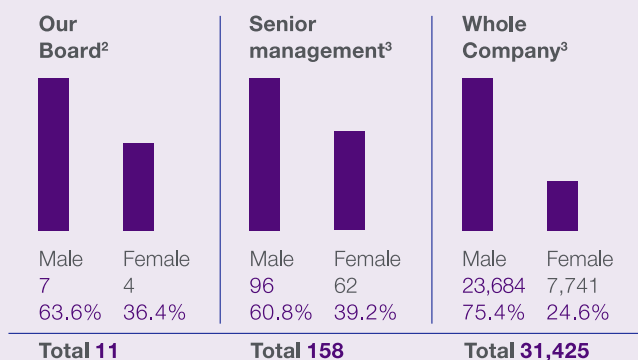
In the US, all colleagues are paid above the statutory minimum and over the last year we have improved our base gender and ethnicity pay gaps. We aim to develop a diverse workforce representative of our communities and drive down pay gaps further.

In addition, our policy also ensures that individuals identifying as having a disability receive fair consideration for all vacancies, with reasonable accommodations and additional resources provided whenever feasible. We are dedicated to equal opportunities in recruitment, training, promotion and career development for all our colleagues, including those with disabilities.



Further details can be found in our 2023/24 RBR which will be published in due course

**Gender demographic as at 31 March 2024<sup>1</sup>**



**Gender demographic table footnotes**

- We have included information relating to subsidiary directors, in accordance with the Companies Act 2006 (Strategic Report and Directors’ Report) Regulations 2013. ‘Senior management’ is defined as those managers who are at the same level, or one level below, the Group Executive Committee. It also includes those who are Directors of subsidiaries where we have a majority interest, 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.
- ‘Board’ refers to members as defined on the Company website.
- In scope are active, permanent employees. Out of scope are non-employees, temporary staff and interns.

## Responsible business

### fundamentals

# 99.9%

network reliability

# 97%

of colleagues completed  
Code of Ethics training

We continue to invest in infrastructure and advance new technologies and innovations that benefit our customers and society. We will ensure appropriate governance is in place to deliver on our responsible business commitments. We will monitor security and risk, including both cyber and physical.

We will maintain the highest standards of ethical conduct, respecting human rights and promoting decent working conditions and fair pay. Our suppliers will be treated fairly and promptly. We will engage in developing responsible business practices with our stakeholders and wider industry.

**We are committed to safely, reliably and efficiently connecting millions of people to the energy they use.**

Keeping ourselves and each other safe is core to our values at National Grid. Our safety ambition is always to do the right thing regarding safety by demonstrating safe behaviours. Stand up for Safety aims to align everyone behind the Company-wide safe to principles of: Safe to Say, Safe Choices, Safe to Stop and Safe to Learn. These are the behaviours we want to see in all our colleagues as they undertake their everyday actions.

**We are building resilience into our operations** across networks and the business through various activities such as: digitising our Business Continuity Programme; testing advanced automated technology to restore customers more quickly and developing IT and digital resilience. This year we have maintained reliability at over 99.9% across our networks.

**We continue to influence our supply chain to operate as responsible businesses.** During the procurement assessment process, our suppliers must adhere to our Supplier Code of Conduct as a minimum standard. This Code sets out our expectations, values and principles as a responsible business and covers topics from wages to environmental strategies.

**We prioritise prompt payment to our suppliers,** recognising the importance of cash flow. We strictly adhere to the agreed payment terms set out in contracts or purchase orders, understanding that timely payment is crucial for their financial health and operational sustainability.

**We will ensure we maintain the highest standards of ethical 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. We have a Group-wide framework of controls designed to prevent and detect bribery. Our Code of Ethics 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', and is governed by our executive Group ERCC.

To ensure compliance with the UK Bribery Act 2010 and other relevant legislation, we undertake a fraud and bribery risk assessment across the Company on an annual basis to identify higher-risk areas (such as system access controls, supplier fraud and potential conflicts of interest) and make sure adequate policies – such as our Anti-Financial Crimes Policy, which applies to all colleagues and those working on our behalf - and procedures are in place to address them. Ethics and Business Conduct reports are discussed quarterly at the ERCC and twice a year at Audit & Risk Committee. Serious issues that meet our escalation criteria are reported in line with our escalation process through the Global Chief Engineer & Chief Risk Officer, Group General Counsel & Company Secretary, Audit & Risk Committee and the Board as appropriate. All cases are investigated promptly and where appropriate, acted upon, including ensuring any lessons learnt are communicated across the business.

### Human rights

We promote and incorporate respect for human rights in our employment practices and values, which are integral to our Code of Ethics, to maintain our reputation as an ethical company that stakeholders want to do business with and employees want to work for.

In 2023, we introduced a separate Human Rights Policy to hold ourselves accountable to respect the rights of our workforce, our value chain and those impacted by our operations while providing a safe, secure and inclusive work environment. Further details are on page 239 of this report.

We also publish an annual Modern Slavery Statement, outlining our approach to mitigating the risk of modern slavery in our business and supply chain.

**We remain committed to being a compliant and ethical business in everything we do.** We maintain high standards of compliance and have established rigorous internal incident categories to drive the right behaviours and facilitate learning.

**We continue to invest in developing technologies and innovations that benefit our customers and wider society.** This year, National Grid Partners invested \$20 million (£15.9 million) in three new startups: ev.energy, HELIXintel and Modern Hydrogen. All these companies are helping our customers to drive the energy transition. More than 80% of our National Grid Partners' portfolio engages with our business units to make our energy networks smarter, safer and greener.

**We continue to ensure we have appropriate governance in place to deliver on our responsible business commitments.** With the support of our Board and five sub-committees we are provided with strategic direction, objectives, purpose, values, culture and a governance structure to achieve long-term success and deliver sustainable shareholder value.

For further information on the role and responsibilities of the Board and Committees please refer to page 76 of the ARA.

### Whistleblowing

We operate a confidential internal helpline and an external 'Speak-up' helpline that is always available, in all the regions where we operate for individuals to raise concerns about breaches of the Code of Ethics. In addition to refreshing our Code of Ethics in March 2024, we published a new 'Speak-up' policy which set out how we will protect anonymity, support and protect whistleblowers and our zero-tolerance approach towards any form of retaliation. During 2023/24 97% of colleagues completed Code of Ethics training. Further details on whistleblowing is discussed by the Audit & Risk Committee, see page 93.

**We continue to ensure security and risks, both cyber and physical are appropriately monitored.** Our focus is on prioritising cyber security and data protection through the implementation of effective solutions. This includes managing vulnerabilities, ensuring compliance with regulatory requirements, and fulfilling reporting obligations. We enforce data protection controls to comply with relevant privacy laws and standards. This includes implementing measures like strong passwords, regular software updates and providing employee training on best practices.

**We are committed to working with stakeholders and the wider industry to champion responsible business practices and advocate for action.** Our approach will be outlined in our Responsible Business Report on stakeholder engagement, international engagement and responsible political lobbying.



# Our stakeholders

**Effective stakeholder engagement is key to the creation and successful achievement of the Group's long-term strategy.**

## How we engage

We engage with our broad and diverse stakeholder population at all levels of the Company. Engagement is led by the most appropriate colleagues, meaning engagement with key senior stakeholders is carried out by management teams across the business. Our Directors also engage with their stakeholders on a regular basis. To ensure we can act on what we hear through our engagement activities and to inform decision making, reporting mechanisms are in place to enable a flow of information from our stakeholders to the Board and its Committees.

In addition, an overview of business-level engagement and outcomes is regularly reported to the Board or appropriate Committees. The cadence and content of these reports to the Board are considered bi-annually as part of the forward business review by the Chair, Chief Executive and Group General Counsel & Company Secretary, to ensure sufficient consideration is given to pertinent matters and affected stakeholders and colleagues from across the business during the year.



### Further reading

#### Section 172(1) Statement

- Pages 82 – 83 comprise our Section 172(1) Statement.

The following should also be read in conjunction with this statement:

- Pages 80 – 81 set out key matters considered by the Board during the year.
- Pages 85 – 86 describe the Board's workforce engagement strategy.



## Customers



## Investors

### Overview

Customers are the heart of our business. Regular and effective engagement with them is key to us delivering what they need and expect from us, from large-scale connections in support of net zero, to domestic connections in homes and businesses within the communities we serve.

We engage with both equity and debt investors around strategy and performance, to keep them informed and to enable us to be held to account. They play a vital role in enabling us to deliver the investment required for a clean, fair and affordable energy future.

### Interests

Our customer base is broad and their interests are wide-ranging. All, however, expect efficient and reliable service, and transparency and fairness in how we work with them. They expect us to understand them and their challenges, and how our activities can impact their lives and businesses.

Investors are interested in our financial and operational performance, which act as key indicators of our ability to provide attractive returns and credit worthiness. There is also increased interest in our responsible business commitments and reporting to provide assurance that investments are sustainable, ethical and responsible.

### Engagement

In addition to ongoing day-to-day engagement in relation to customer accounts and connection projects, our senior leaders regularly meet customers to discuss strategic priorities and to invite feedback on our plans.

This year, our customer engagement has focused on topics including social obligations, affordability and the transition to clean energy, through customer panels, community board meetings, chamber meetings and one-to-one meetings with customers and community groups.

In addition to regular engagement via our Investor Relations team and senior management, we held key events across the year including:

- financial results presentations, roadshows and our hybrid AGM (see page 86), deal-specific debt engagement for select bond issuances during the year;
- a UK ED event focused on integration into the Group and future investment plans; and
- our Responsible Business webinar, where our Chief Executive, Chief Sustainability Officer and New York President covered our ESG performance and launched our new RBC.

### Outcomes

Engagement with UK customers has helped identify fundamental change needed within the connections landscape and is driving our short-term work to support customer needs, and the wider regulatory reform needed to enable net zero. It also feeds into our Major Connections Strategy for RIIO-ED2.

In the US, new enrolments in energy products, account solutions, and adoption of new digital channels are a direct result of the efforts made to engage our residential and commercial customers. Our engagement has also increased our visibility in local communities, enabling more meaningful interactions on affordability and clean energy technology options.

Our continued investor engagement throughout 2023/24 has helped investors better understand our investment case and has provided visibility on our strategy, performance and financial strength.



### Colleagues

We listen to and engage extensively with our colleagues through a number of channels and processes. This enables us to understand their needs and requirements and build a culture that will help to drive our performance, shape our plans and develop a skilled and motivated workforce.

Colleague interests are wide-ranging. They have an obvious interest in company performance and what this means for them individually, but also want to understand, and play a part in shaping our role in the industry and broader energy transition.

We have had an extensive programme of colleague engagement over the past year via regular live webcasts with our Chief Executive, a programme of leadership visits out to our field and operational sites, Grid:home, email, Viva Engage (internal social media network), interaction with our many Employee Resource Groups (ERGs) and our twice yearly employee engagement survey, Grid:voice. These channels provide colleagues with information and a chance for two-way dialogue. The Board receives regular updates on employee matters via the Chief Executive and Chief People Officer. We also engage regularly with colleagues through their representatives in various trade unions in both the UK and US on a range of matters, including pay and terms and conditions of employment.

This year, 78% of colleagues took part in our Grid:voice survey, with an employee engagement index score of 81% favourable. This was unchanged from the previous year but remains four points higher than external benchmarks. Our ERGs play a key role in helping us to achieve our DEI aspirations whilst providing a sense of community to help everyone feel comfortable to bring their whole selves to work. We have 16 highly active and visible ERGs; eight in the US, four in the UK and four global. Our ERG membership now stands at close to 9,000 unique members.



### Suppliers and contractors

Engagement with this group of stakeholders – listening to their ideas and working in partnership – is important to help us collectively find better and more innovative ways of delivering our commitments. We engage both strategically and tactically across a range of topics and projects.

In addition to day-to-day commercial interests, our suppliers and contractors would like greater forward visibility and contractual commitment over a longer horizon to help them develop skills, build capacity and support innovation to meet our needs, often with a focus on sustainability and what the collective path to net zero looks like.

We engage extensively and often with our supply chain in the course of our business. We also have structured quarterly engagement with strategic suppliers and contractors, complemented by Executive sponsored senior-level engagements to foster collaboration and discuss strategic issues facing the sector. In the past year, our engagement has included:

- an Engineering, Procurement, Construction Contractor Forum and one-to-one engagement to discuss ways to develop capacity at local and regional levels;
- engagement through the Supply Chain Sustainability School (UK) and Sustainable Supply Chain Alliance (US);
- alignment of UK Supply Chain Policy position to inform government and Ofgem on changes required for connecting offshore wind; and
- involvement in the Procurement Skills Accord (part of Energy & Utility Skills) and Utilities Against Slavery.

Our engagement has ensured our supply chain has an understanding of the key themes and priorities related to our business, and that they are able to provide input across a range of initiatives, allowing us to work with them to manage continuity of supply in the shorter term and shape our approach to future challenges, such as the acceleration of network investment for net zero. Aligned to this, we have committed work to the supply chain valued at £4.5 billion through the Great Grid Partnership, which will secure the capacity to deliver an initial nine onshore ASTI projects to provide a long-term market signal for low-carbon solutions.



### Communities and governments

We exist to provide our communities with the energy they need. We work closely with state, federal, national, local and European governments to create the regulatory and policy frameworks required to deliver today's energy needs and to support a clean, fair and affordable transition to net zero.

Our communities need us to deliver energy security, reliably and affordably, whilst minimising the impact our operations have on them. Communities and government are focused on the cost of living, economic recovery and ensuring a fair transition to net zero.

In both the UK and US, we engage with community stakeholders, government officials and members of the public to understand what 'fair' means and how it should shape our plans. We also engage extensively as part of our major projects planning consultations. Our government engagement includes executive-level advocacy to enable policy to achieve net zero, plus engagement via bilateral meetings, round tables, Select Committee participation, and government forums.

Our engagement is informing our plans for how to deliver a fair transition. This year, our community investment and workforce development activities have played an important role in supporting economic growth and upskilling of communities through our outreach programmes, focusing on areas experiencing the highest levels of socio-economic disadvantage. Community engagement also continues to be a critical enabler for progression of new infrastructure projects. We have helped shape legislation, including the US Inflation Reduction Act and UK Energy Act, and have ensured the development of network infrastructure is recognised as a key enabler of net zero.



### Regulators

We engage with our regulators on an almost daily basis, whether on rate cases in the US and price controls in the UK, or to help set policy and shape future regulatory frameworks that allow our customers, stakeholders and ourselves to meet objectives. We also regularly engage with regulators who oversee remediation activities associated with historic environmental remediation obligations in the US.

Our regulators' interests are based around a common theme, whether UK or US, state or federal – to protect the interests of customers and to ensure affordable, safe, secure and reliable access to the energy we provide, whilst protecting the natural environment.

Engagement with regulators in both the UK and US is frequent and comprehensive. In New York and New England, we work with state regulators to set strategy and achieve positive financial and policy outcomes to meet customer priorities and deliver shareholder value. This has included semi-annual updates to the NYPSC Chair and Commissioners by our New York President. In Massachusetts, our President engages regularly with the MADPU Chairman, Commissioners and senior staff. We also have regular engagement with the FERC and its staff, as well as the Environmental Protection Agency and New York State Department of Environmental Conservation. In the UK, our engagement through bi-laterals, round tables, workshops and site visits has included finalising UK ED's price control and helping to shape Ofgem's new ASTI framework.

Our engagement has led to a range of positive outcomes in the past year, including filing of a Joint Proposal with NYPSC for a three-year rate settlement at our downstate gas distribution businesses, KEDNY and KEDLI (see page 224).

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

**At National Grid, we recognise that addressing climate change is the defining challenge of the 21st century. Our networks and operations play a central role in the transition of the energy system in the jurisdictions where we operate. We are supportive of the Paris Agreement's long-term goal to keep the rise in global average temperature by 2100 to well below 2°C above pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C.**

We have supported the recommendations of the TCFD since its initial publication. The framework, which helps us understand the impact of climate change on our business, has benefitted us directly by: shaping our governance structure to effectively oversee risks and opportunities; aligning our business strategy to identify and seize transitional opportunities; developing values of sustainability in our corporate culture; and embedding climate change into our risk management framework, which has engaged our lines of defence to manage the associated risks.

In this year's disclosure we have fully complied with the FCA Listing Rule 9.8.6R(8). Our climate-related financial disclosures are considered to be consistent with the TCFD's four recommendations and 11 recommended disclosures, as illustrated in the index to the right. In addition, we have also fully complied with the climate-related financial disclosure requirements set out in s.414CA and s.414CB of the Companies Act 2006.

In the following sections, we set out our response to the TCFD's four core recommendations – governance, strategy, risk management, and metrics and targets – in line with the recommendations and guidance described above. We will also be publishing a new Climate Transition Plan in 2024, which sets out the strategic action plans and mechanisms we have in place to realise our net zero commitments.

## TCFD index

The following index navigates between our disclosures and the TCFD's recommendations and recommended disclosures:

### 1. Governance

#### Disclose the organisation's governance around climate-related risks and opportunities

- Describe the Board's oversight of climate-related risks and opportunities: page 45
- Describe management's role in assessing and managing climate-related risks and opportunities: page 46

### 2. Strategy

#### Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material

- Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term: pages 53 – 57
- Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning: pages 53 – 57
- Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario: pages 47 – 51

### 3. Risk management

#### Disclose how the organisation identifies, assesses and manages climate-related risks

- Describe the organisation's processes for identifying and assessing climate-related risks: page 52
- Describe the organisation's processes for managing climate-related risks: page 52
- Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management: pages 52 – 57

### 4. Metrics and targets

#### Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material

- Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process: page 57
- Describe Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks: pages 57 – 58
- Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets: page 57

# 1. Governance

## The Board sets and leads the Company’s climate-related strategy and goals and has oversight of climate-related risks and opportunities impacting the Group.

National Grid has four strategic priorities, as set out on pages 16 – 17, one of which is to enable the energy transition for all. Responding to climate change and the transition to net zero is therefore at the heart of our strategy. The Board delegates elements of its responsibility to its various Committees, although retains ultimate responsibility in setting the Company’s climate-related strategy and goals.

Members of the Board bring a variety of skills and experience, including expertise in delivering sustainability and climate change strategies. Several members of the Board have specific experience of this, including Martha Wyrsh and Earl Shipp. Martha brings extensive knowledge and experience around climate related issues through her experience as CEO of a major international gas transmission business as well as leading the growth and development of Vestas’ renewable energy business in the US. Earl Shipp, Chair of the Safety & Sustainability Committee, through his extensive career in the chemicals industry and his experience as a member of the Federal Reserves Energy Advisory Committee brings to the Board significant safety and project management experience, and knowledge

of environmental, sustainability and climate-related issues. See pages 78 – 79 for information on the individual experience of Board members and page 96 for the specific skills attributed to the Board, including sustainability and climate change.

The Board received three updates from the Chair of the Safety & Sustainability Committee in the year to provide an overview of matters discussed at its Committee meetings, including progress against goals and targets for addressing climate-related issues. The Board receives a Chief Executive and Business Update report at each meeting which includes quarterly reporting of climate change metrics such as GHG emission metrics versus target.

The Safety & Sustainability Committee met three times during the financial year to discuss climate-related risks and opportunities. In addition to these formal meetings, a regular dialogue was maintained between the members of the Committee and senior management to enact the Company’s climate-related strategy. An enrichment session on climate-related matters, including the adoption of the 1.5°C aligned near-term targets, were held to brief the Committee and other members of the Board on climate-related matters and update on the progress made against climate-related targets. The People & Governance Committee reviewed the composition of the Board and its committees in the year, applying a Board skills matrix to ensure there is an appropriate balance of skills and competencies, including climate change (see page 88).

In September 2023, a joint session was held between the Safety & Sustainability Committee and the Audit & Risk Committee to discuss the ESG reporting landscape and the Group’s ESG reporting assurance strategy. It was agreed to start work on a control framework that would enable future reasonable assurance over the reporting of Scope 1 and 2 emissions. It is intended that future joint sessions will be held where it is beneficial to align and facilitate collaboration between the two committees. During the year, the Safety & Sustainability Committee undertook a risk deep dive session on climate change to understand its impact on the Group’s strategy. In November 2023, there was a workforce engagement session with members of the sustainability and sustainability reporting teams to discuss our climate transition and external reporting approach.

The remit of the Board and its Committees under our governance framework, as well as the number of times they meet and the climate related issues that were discussed through the year, are set out on pages 76 – 83. Terms of Reference for the Board and its Committees are available at [nationalgrid.com/about-us/corporate-information/corporate-governance](https://nationalgrid.com/about-us/corporate-information/corporate-governance)

### Board level

<p><b>Safety &amp; Sustainability Committee</b></p> <p>Responsible for assessing and monitoring our environmental sustainability strategy and performance, overseeing progress against our net zero aims and considering potential climate change risks and opportunities</p>	<p><b>Audit &amp; Risk Committee</b></p> <p>Oversight of our RBR, TCFD disclosures and reporting in line with leading ESG frameworks and the progress of our ESG control and assurance framework</p>	<p><b>Remuneration Committee</b></p> <p>Considers and approves whether and how ESG targets, including Scope 1 and 2 emission reduction targets, are incorporated into our incentive arrangements</p>	<p><b>People &amp; Governance Committee</b></p> <p>Is updated on the leadership skills and capabilities needed in the business to the right people to deliver our net zero ambitions are being attracted and retained</p>	<p><b>Finance Committee</b></p> <p>Considers the financial impact of climate factors on our credit metrics and relevant considerations with regards to debt investors, pension and insurance strategy</p>
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### Executive level

<p><b>Safety, Health &amp; Sustainability Committee</b></p> <p>Reviews and manages Group-wide environmental tracking/monitoring and the related decisions</p>	<p><b>Reputation &amp; Stakeholder Management Executive Committee</b></p> <p>Provides oversight of Responsible Business policy development and engagement</p>	<p><b>Ethics, Risk and Compliance Committee (ERCC)</b></p> <p>Oversees the implementation of the Group’s risk management and compliance framework and assessment of climate-related principal risks</p>	<p><b>Policy and Regulation Committee</b></p> <p>Agrees and provides strategic oversight of the Group’s climate-related public policy priorities and positions</p>	<p><b>Investment Committee</b></p> <p>Has delegated authority to improve investment decisions, including those related to National Grid Renewables</p>
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### Management level

<p><b>Finance ESG Centre of Excellence/Responsible Business team</b></p> <p>Sets the Group sustainability reporting strategy and ensures credible and reliable reporting of sustainability data</p>	<p><b>TCFD working group</b></p> <p>Oversees progress and publication of our annual TCFD disclosures</p>	<p><b>Sustainability Implementation Group</b></p> <p>Ensures that our RBC commitments and principles are executed and implemented consistently across the Group</p>	<p><b>Sustainability Steering Group</b></p> <p>Provides oversight of the integration of responsible business into National Grid</p>	<p><b>ESG Steering Group</b></p> <p>Provides strategic oversight and alignment on ESG activities including climate</p>
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## Task Force on Climate-related Financial Disclosures (TCFD) continued

### Management's role

The Board delegates to management the responsibility for asset investment and maintenance planning, implementation of the net zero strategy and overseeing the development and achievement of commitments and targets in the RBC, including targets related to delivering our CTP. Management is also responsible on a day-to-day basis for the management of climate-related risks and opportunities faced by the Group and for delivering the roadmaps to achieve the net zero strategy set by the Board.

Sustainability-focused roles have been embedded across the Group to ensure that in addition to the top-down focus, there is also a bottom-up approach to addressing climate-related issues.

Our Chief Sustainability Officer heads a team of subject matter experts who lead the implementation of the RBC across the Group by working closely with business units to ensure their strategy and operations align with our decarbonisation and climate resilience targets. The Sustainability team sets the Group's sustainability strategy, modelling potential climate scenarios and developing glidepaths that align to GHG emission reduction targets. In addition, they have refreshed the Group's CTP in the year which incorporates the Group's newly adopted SBTi targets and seeks to better align with the framework prescribed by the UK's Transition Plan Taskforce (TPT) published in October 2023 and the sector guidance published in November 2023. The CTP will be published in due course.

Climate adaption and mitigation activities to address our physical risks are embedded into our core business processes. The Chief Engineer's Office leads the development of climate adaptation frameworks across the Group to ensure there is a consistent approach to assess the vulnerability of our energy assets and to guide strategic investment planning to ensure network resilience. Further delegation is given to our core operational businesses including Business Unit Presidents who are accountable for delivering the net zero roadmaps for their businesses. Corporate Affairs, Group Finance, Sustainability, Safety & Health and People teams support the businesses in achieving their net zero pathways.

The Group Finance function continues to build out its sustainability capabilities through its ESG Centre of Excellence, Investor Relations and Group Treasury teams. These teams are responsible for setting the Group sustainability voluntary and mandatory reporting strategy and ensuring credible and reliable internal and external reporting of sustainability data. This is achieved through attracting green investment and engaging with debt and equity investors to articulate our climate strategy and how we are managing our climate-related risks and opportunities and engaging with, and supporting, suppliers on their decarbonisation journey.

In addition, the ESG Centre of Excellence has been responsible for tracking the Group's GHG metrics against targets, developing controls for scope 1 and 2 GHG emissions, managing external assurance and coordinating ESG rating agency submissions.

### How management is informed about climate-related issues

Climate-related issues are flagged via the Enterprise Risk Management (ERM) process described in the Risk section and as set out on pages 22 – 30. We also have a monthly business review process whereby more granular targets are embedded in business unit performance contracts. In addition, we engage in regular discussions with regulators, policymakers and other key stakeholders, which helps inform management on key horizon risks.

### Other relevant forums

On page 77, we outline the key Group Executive Committees' responsible for monitoring and driving our sustainability performance and managing climate specific risks and opportunities. Our key management committees are described in more detail below.

The TCFD working group, led by Group External Reporting, comprises representatives from Sustainability, Corporate Strategy, Group Risk and Company Secretariat. This group oversees progress against the TCFD recommendations and ensures the publication of our annual disclosure fulfils mandated reporting requirements, including the climate-related financial disclosures set out in the Companies Act 2006.

The Sustainability Implementation Group, led by our Responsible Business team, brings together the Sustainability team and representatives from each business unit to ensure that the commitments and principles in our RBC are executed and implemented consistently across the Group. The Sustainability Implementation Group monitors progress against the agreed Responsible Business commitments, including GHG emission reduction commitments, and ensures related topics and issues are reviewed and, where necessary, escalated to the Sustainability Steering Committee.

The Sustainability Steering Group, chaired by the Chief Sustainability Officer, provides oversight of the integration of responsible business into National Grid, including the development of climate targets and future strategy.

The ESG Steering Group brings together senior leaders from Group Finance, Sustainability, Corporate Affairs and Group Legal to provide strategic oversight and alignment on ESG activities including climate, particularly ahead of formal governance meetings, and to discuss insights on latest external ESG trends and potential strategic implications for the Group.

The Business Unit Green Financing Committees, chaired by the Group Treasurer, provide governance over our Green Financing Programme that aims to attract funding for the capital investments required to deliver our transition plan. They also approve the publication of our Green Financing Report, which provides an analysis of how we utilised the proceeds from our portfolio of green bonds and their environmental impact.

### Engaging on policy interventions

Advocating for climate action is crucial in fulfilling our net zero commitment, as it establishes the necessary structures and circumstances for reducing emissions and enabling more ambitious action towards a clean, fair and affordable energy future. Over the course of the year we have worked closely with policymakers to navigate the energy transition and leveraged our expertise in energy delivery systems to engage on the goals and political interventions of the jurisdictions in which we operate.

In particular, we participated in COP28 in December 2023, building on our presence and the partnerships we have built during our involvement in COPs over the last three years. We took a small, diverse delegation, partnering with the UK government, We Mean Business Coalition and Climate Action, and collaborating with dozens of other organisations. We hosted and participated in over 110 events discussing how to work together across the public and private sectors to deliver the energy transition in a manner that is just and equitable, achieves system wide resilience and develops secure, reliable and clean power systems for the inclusive green economy.

We also engage within our own communities in the UK and the US, with programmes such as Grid for Good, as well as taking a leading role to enable the global decarbonisation of the energy sector and collaborating with peers in other countries that are looking to develop green grids regionally and nationally. We do this by engaging directly with other countries' governments and power companies, and through our active participation and support of global initiatives such as the Green Grids Initiative, the Energy Transition Council and Mission Innovation.

We share learning and experiences to encourage the rapid scale-up of renewable energy and the transition away from coal.

Our international engagement allows us to contribute towards decarbonisation on a global level, and to connect and collaborate with a more diverse set of people and organisations. Talking to people from different sectors and a wide range of countries helps us understand more perspectives and enables us to make better decisions as a responsible business.

## 2. Strategy

### The work we have done to better understand our climate-related risks and opportunities has helped to inform recent strategic decisions.

In March 2021, we announced our strategic pivot towards electricity, which resulted in the acquisition of UK ED, the sale of our Rhode Island electricity and gas business and the sale of an 80% equity interest in the UK Gas Transmission and Metering business. This has shifted our portfolio of Group assets from approximately 60% electricity in 2021 to approximately 70% electricity in 2024.

Our strategic pivot has positioned us well to benefit from the significant growth opportunities from the transition to net zero. These opportunities are reflected in our recently updated five-year financial framework, which now forecasts £60 billion of investment across our energy networks and adjacent businesses in both the UK and US. Of this, £51 billion is directly linked to the decarbonisation of energy networks and is considered to be aligned with the principles of the EU Taxonomy for climate change adaptation and mitigation.

In addition, the Group has continued to grow its investment in our NGV business, which includes our interconnectors business in the UK and large-scale renewables generation in the US. In December 2023, our sixth interconnector, Viking Link, became operational, bringing our total interconnector portfolio to 7.8 GW. In our UK ET business, we have made good progress in the year on our ASTI projects, which will enable the upgrade of the East Coast transmission network in the UK and play a vital part in achieving the UK government's ambition of connecting 50 GW of offshore wind by 2030. In the US, well-developed scenarios have enabled us to submit credible rate case filings outlining the investments needed to deliver the energy transition. In New England, we submitted our ESMP, outlining the critical investments needed in the electricity distribution system over the next decade. We are also building support for the use of alternatives to geological natural gas in our gas network. These activities further enhance our role in delivering the energy transition, whilst helping to ensure energy security and sustainable affordability in the regions we operate in.

### Scenario analysis

Scenario analysis to 2050 and beyond guides our strategic and investment decision-making process and supports delivery of our climate-related targets. It also supports our assessment of the resilience of our business strategy and assets. In modelling our scenarios, we consider different climate emissions pathways which are defined by assumptions pertaining to policy change, consumer behaviour, energy outlooks, technology innovation, competition and global temperature change.

### Transition scenario modelling

We use Group-wide climate scenarios to assess direct impacts of climate change. These scenarios consider the potential physical impacts to the Group of average global temperature increases of 2°C and 4°C by 2100 from pre-industrial levels. We also consider potential transitional impacts of scenarios of average global temperature increases of 1.5°C, in keeping with the Paris Agreement.

We also model three scenarios which are tailored to the specific business environments within the UK and the US: delayed policy, hybrid net zero and electric net zero. These bespoke scenarios are developed internally by our market analytics teams in both regions. Inputs are continually updated through the year as part of our normal risk management process and we conduct an annual refresh to reflect the macroeconomic environment as part of our strategic horizon scan.

Our scenarios help us to understand a credible range of possibilities in those countries for the changes which drive different levels of climate change, as well as the secondary effects of different climate scenarios. In the UK, we also produce more granular scenario analysis at a distribution level. The Distribution Future Energy Scenarios (DFES) uses the same core framework as the Future Energy Scenarios (FES) published by the ESO. Unlike FES, the scenarios that follow, and the DFES scenarios, focus on the impacts to our business units and customers rather than the nationwide, cross-vector analysis conducted by the ESO.

In our analysis, we do not make a judgement on the likelihood of any one scenario relative to others so, by design, the analysed scenarios do not encompass all possible future pathways and their associated risks. There are limitations within the scope of our modelling, for example available data across other sectors, but to minimise this impact we have utilised a wide range of resources and compared our results with external scenarios. While our scenarios are not intended to be predictions of likely future events, they inform our understanding of possible risks and opportunities arising as a result of climate change.

These scenarios, along with our strategic planning and risk management approaches, guide us in the identification of material climate-related risks and opportunities as set out on pages 52 – 57.



In December 2023, our sixth interconnector, Viking Link, became operational.

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

		Delayed 2 – 4°C	Hybrid 1.5°C	Electric 1.5°C
Scenario: Climate change by 2100 vs. pre-industrial levels (approximate)	UK assumptions	<ul style="list-style-type: none"> <li>Decarbonisation progresses but is insufficient to meet net zero in 2050</li> <li>Renewable capacity targets missed</li> <li>Resource nationalism disrupts established trade flows</li> <li>Supply chain disruptions and higher material prices</li> <li>Policy delays</li> </ul>	<ul style="list-style-type: none"> <li>Achieves net zero power system before 2040 and economy-wide net zero by 2050</li> <li>Strong electrification with a more gradual decarbonisation path in the medium term, mixed with limited hydrogen use in some sectors</li> <li>Storage, interconnection and higher nuclear are supplemented by hydrogen and abated gas generation capacity</li> <li>Meets most decarbonisation targets, some with minor delay</li> <li>Total final energy consumption reduces in medium term but increases by 2050 as more efficient electric technology is complemented by hydrogen consumption in some sectors</li> </ul>	<ul style="list-style-type: none"> <li>Achieves net zero power system by 2035 and economy-wide net zero by 2050</li> <li>Near-complete electrification of demand sectors such as heat and transport supported by strong renewable expansion with distributed flexibility, storage, interconnection and some abated gas capacity providing dispatchable supply</li> <li>Meets most decarbonisation targets</li> <li>Total final energy consumption reduces by 2050 as more efficient electric technology replaces combustion technology</li> </ul>
	US assumptions	<ul style="list-style-type: none"> <li>Clean energy infrastructure takes longer to build due to persistent inflation and permitting challenges</li> <li>Modest electrification</li> <li>No large-scale hydrogen production by 2050 within our states</li> </ul>	<ul style="list-style-type: none"> <li>Net zero emissions achieved on schedule</li> <li>Balance of electrification and decarbonised gas to get to net zero</li> <li>Hydrogen power generation and non-power sector hydrogen demand (some in-region electrolysis)</li> </ul>	<ul style="list-style-type: none"> <li>Net zero achieved on schedule</li> <li>Near-complete electrification of most end-uses</li> <li>Hydrogen for power generation (hydrogen imported)</li> </ul>

		Delayed 2 – 4°C			Hybrid 1.5°C			Electric 1.5°C		
		2023	2035	2050	2023	2035	2050	2023	2035	2050
Annual electricity demand, TWh <small>UK 2023 figures (provisional)</small>	UK	310	420	630	310	449	678	310	477	719
	US NY	147	182	213	147	187	216	147	195	236
	US NE	112	176	216	112	184	220	112	189	235

		Delayed 2 – 4°C		Hybrid 1.5°C		Electric 1.5°C	
		2023	2035	2023	2035	2023	2035
Number of residential heat pumps, millions	UK	0.43	3.00	0.43	3.80	0.43	7.50
	US NY	0.06	0.90	0.06	1.40	0.06	1.80
	US NE	0.20	1.00	0.20	1.60	0.20	1.90

		Delayed 2 – 4°C		Hybrid 1.5°C		Electric 1.5°C	
		2023	2035	2023	2035	2023	2035
Number of passenger EVs, millions	UK	0.95 3% of car fleet	13.6 39% of car fleet	0.95 3% of car fleet	14.80 41% of car fleet	0.95 3% of car fleet	17.30 48% of car fleet
	US NY	0.20 1.7% of car fleet	4.50 49% of car fleet	0.20 1.7% of car fleet	4.80 52% of car fleet	0.20 1.7% of car fleet	4.80 52% of car fleet
	US NE	0.15 1.7% of car fleet	4.80 44% of car fleet	0.15 1.7% of car fleet	5.10 46% of car fleet	0.15 1.7% of car fleet	5.10 46% of car fleet

Note: NY refers to New York State, NE to New England (entire region, not just National Grid regions).



		Delayed 2 – 4°C			Hybrid 1.5°C			Electric 1.5°C		
		2023	2035	2050	2023	2035	2050	2023	2035	2050
<b>Annual natural gas demand, TWh</b> Note: UK figures include unabated and abated gas for power generation; US figures include only unabated gas	UK	704	496	161 (72 from power generation with carbon capture and storage)	704	369	48 (44 from power generation with carbon capture and storage)	704	381	82 (81 from power generation with carbon capture and storage)
	US NY	370	217	131	370	163	13	370	132	13
	US NE	251	138	90	251	104	16	251	87	16
		Delayed 2 – 4°C			Hybrid 1.5°C			Electric 1.5°C		
		Between 2023 and 2050 (2023 prices)								
<b>Total clean technology capex</b>	UK	£692 bn			£830 bn			£906 bn		
	US NY	\$103 bn			\$118 bn			\$152 bn		
	US NE	\$94 bn			\$98 bn			\$133 bn		

Note: Natural gas demand in our US regions is the same in 2050 under the hybrid and electric scenarios because the only remaining natural gas demand in both scenarios is in hard-to-abate sectors. This figure does not include RNG, which we believe will serve future gas demand under our Clean Energy Vision.

## Changes to inputs

Notable changes to inputs this year include the following:

- Reduced role for hydrogen in heating in Electric and Delayed UK scenarios, and reduced hydrogen production domestically in the US Northeast due to the absence of a local hub backed by the federal government.
- Increase in subsidy for low-carbon technologies in the US and UK.
- New ban on internal combustion engines in the UK delayed to 2035, though the government's mandate still targets 80% of new vehicles sold to be zero emission by 2030.
- Increased (electric) load forecasts in the US, impacting the supply mix: NYISO revised up its baseline load forecasts by 5.5% for 2030, mostly reflecting growing large industrial loads and the Independent System Operator, New England (ISO-NE) load forecasts also increased by around a more modest 2% in 2030 versus last year's scenarios.
- Delay to US offshore wind build through 2030 following recent contract terminations and higher costs.
- Reduction in in-region electrolysis in the US for net zero scenarios, in the absence of a local hub backed by the federal government to spur development, with the balance of volumes needed to achieve the Clean Energy Vision (in the Hybrid scenario) imported from lower-cost regions.

Note: inputs are changed in all scenarios unless otherwise specified.

## Transition insights

We test the resilience of our business strategy against our transition scenarios, focusing our transition risks on the scenarios associated with lower temperature rises. Although current global climate policies and actions suggest a lower than 4°C scenario, a 4°C scenario was still modelled in line with our approach to scenario modelling outlined above.

The transition impact on the Group is most significant in scenarios resulting in a lower degree of warming given the increased action required. The following five transition insights are therefore most relevant to a 1.5°C scenario. As expected, these remain consistent with our headline insights from the previous year:

### 1. Urgent collective action required across society

To reach net zero requires new policies and technology development. Action is required by a wide range of stakeholders in the industry as a result of the public expectations on climate change; there is a push for new policies, action and government and state targets in the regions we operate. Our ability to meet our own net zero commitments relies on these and is covered in more detail in the risk and opportunities section.

### 2. Retaining consumer buy-in will be key

To reach net zero, consumers can drive domestic heating and transport decarbonisation by switching to low-carbon alternatives such as EVs and heat pumps. EVs are expected to make up over 60% of car sales by 2040, and increased consumer demand such as this will drive additional growth and investment in our electric network businesses.

### 3. Electricity use and share of final demand will increase

Global electricity networks are expected to grow to deliver an increase of 50 – 160% of current demand by 2050 due to fuel switching, with both heating and road transport sectors decarbonising. This will drive additional growth and investment in our electricity network whilst resulting in lower demand for our gas network.

### 4. Energy supply structure will shift

There will be a global shift to power generation from renewable sources, most notably wind and solar. Global offshore wind is expected to triple in output from 2030 to 2050 and connecting this could drive significant growth opportunities for our businesses. Hydrogen and renewable natural gas are likely to replace natural gas in the US, with applications such as interseasonal storage in the UK.

### 5. Pathways will adapt to global and local realities

For example, the Northeastern US region is expected to import hydrogen to support decarbonisation, but in the UK, hydrogen production and carbon capture, utilisation and storage (CCUS) may develop due to policy and geology. It is important that our businesses monitor and adapt to these differing pathways in their respective geographies.

**None of the transition scenarios tested threaten the resilience of the Group and we are in a strong position to adapt our portfolio to maximise the opportunities of the energy transition.**

Further detail on the transition risks and opportunities identified in our scenario analysis, including estimated qualitative and quantitative impacts where applicable, can be found on pages 53 – 57.



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

## Physical modelling

We have modelled the way in which our business could be directly impacted as a result of increasing extreme weather events and chronic changes in weather patterns. For physical risks, we review climate hazards which we believe would have the most significant impact and are most likely to occur within our service territories.

The climate hazard data is sourced from the relevant national climate assessments (NCA4 in the US and UKCP18 in the UK). The scenario data are modelled using the IPCC's Representative Concentration Pathway (RCP) scenarios of RCP8.5 (4°C) and RCP4.5 (2°C). The modelling covers decade timeframes; 2030s, 2040s, 2050s and 2070s, with comparison to a baseline of 1981 – 2010 in the UK and 1976 – 2005 in the US.










## Physical insights

Most hazards are projected to increase in frequency in the future, with high temperatures and coastal flooding of particular concern across consistent areas of our operations. In most cases the level of risk is greater in a 4°C scenario than a 2°C scenario.

We have progressed our physical risk analysis and asset vulnerability to inform our strategic planning and investment choices. Our internal Climate Change Risk Tool (CCRT), which has a dedicated geospatial capability, is enabling us to create bespoke physical risk assessments for each business based on the specific asset and hazard data that is material to their operations, while still retaining a Group strategic view of our overall business.

Our risk assessment shows the risk to our existing asset portfolio, and we continue to align this with data relating to our new infrastructure investments and our material acquisitions and disposals so that our cumulative picture of risk will begin to change.

These climate hazards most significant to us are summarised in the table below.

Climate Hazard	Definition		Vulnerability	
<b>Flooding</b>	Coastal flooding		Frequency of occurrence of coastal flooding and future impacts due to sea level rise	Risk of power failure, accelerated asset corrosion, debris damage, equipment submersion and water infiltration, soil erosion
	River flooding		Frequency of occurrence of riverine flooding and future impacts due to increase in extreme rainfall precipitation (one day maximum precipitation)	
<b>Warm weather</b>	High temperatures		Number of days per year when maximum daily temperature is above the threshold	Risk of power failure, equipment overheating, warmer air temperatures contributing toward accelerated aging, reduced capacity of transmission and distribution lines
	Heatwave		Number of times per year when both maximum and minimum daily temperature remains above thresholds for several days	
<b>Cold weather</b>	Low temperatures		Number of days per year when maximum daily temperature is below the threshold	Ice accretion overloading overhead lines, structural failure
	Freeze thaw		Number of days per year when temperature cycles above and below freezing in the same day	
	Snow accumulation		Snow build-up on/around assets	
	Ice accretion		Ice build-up on assets	
<b>High Winds</b>	High winds		Number of days per year when maximum daily wind gusts are above the threshold	Structural failure to overhead lines due to extreme wind exceeding design standard and vegetation contact

# Climate Vulnerability Assessment (CVA)

**Our Group-wide CVA considers the impacts of climate change on our assets over the next several decades. Understanding changing climate conditions and the risk to our assets ensures appropriate mitigation efforts are considered to protect existing assets and build climate resiliency into future assets.**

The typical lifespan of our assets is often 50 years or more, so future climate hazards need to be considered during the planning process to avoid premature asset repair or replacement. For example, the location of a proposed new substation may not be in a coastal flood prone area today, but climate

model projections may indicate that it will be in 10 years. Understanding the future climate hazards allows us to make informed design decisions and update hardening programmes to protect our Company’s assets and improve reliability for customers into the future.

Our CVA began in December 2022, led by a steering group of senior leaders from each of our businesses, and a working group with business representatives from our engineering, resilience and policy teams.

It is a phased programme of activity which will deliver an adaptation plan to address assets with the highest resilience risk. Sharing best practice with other energy utilities informs our approach and the ongoing development of our industry-leading Climate Change Risk Tool.

Our CVA is a risk-based approach where each business unit identifies critical assets which are physically vulnerable to climate hazards. The process accounts for existing adaptation plans such as storm hardening programmes and leverages the latest climate science. Adaptations will be local and developed by each business unit to inform standard updates, future capital investments and industry alignment.

The actions taken by the Group in order to ensure we predict and respond to a significant disruption of energy supply because of climate change and storms are described further on page 25.



### 3. Risk management

#### Climate Change and ERM

Climate change is a significant risk for our organisation and we have integrated it into our ERM process as one of our GPRs.

Our ERM framework and process take into account the physical and transition risks associated with climate change, as well as the potential impact of these risks on our business operations, financial performance, and reputation. For more information on our ERM framework and process, see page 23.

For our climate change GPR risk there are two distinct elements:

**1. Climate Change (mitigation GPR):**

The standalone mitigation risk is aligned to our strategic objective 'Enable the energy transition for all', with a focus on delivering clean, decarbonised energy to meet our net zero goals (refer to page 27).

**2. Significant Disruption of Energy (adaptation GPR):**

The adaptation, or physical risk activity, absorbed within the control framework associated with the 'Significant Disruption of Energy' risk, has helped ensure we continue to deliver energy reliably for our customers, with a focus on resilience (refer to page 25).

This allows us to have greater oversight, focus and adoption of two distinct and proportionate control frameworks in line with the new Group risk appetite – mitigating downside risk, and maximising opportunities, where applicable.

We have continued to develop our risk and opportunity horizon scanning to assess critical trends to the energy transition. With our senior stakeholders and supported by external risk experts, we identified key indicators and metrics which are measured on a monthly basis against thresholds. These are analysed against our current strategy and business plans for their potential impact and plausibility. Emerging risks are managed under our risk management framework with results reviewed by senior leadership (detailed further on page 29).

#### Integration of the climate risk management process into our overall risk management framework

Consistent with the Group's overall approach to risk management and internal control, climate change risk management activities take place through all levels of our organisation. We deploy an industry good practice 'Three Lines' model to deliver our risk management and internal control activities which is described further on page 22.

#### Group's Risk Taxonomy

The Group's Risk Taxonomy (detailed on page 22) supports all levels of the business to categorise any climate change risk into one of our four taxonomy groups: strategic, operational, financial, and compliance. Sub-categories beneath these four groups allow the business to select a more granular taxonomy grouping with an assigned risk appetite.

Despite external risk pressures, our risk exposure specific to our climate-related risks is largely unchanged with the majority of our risks operating within risk appetite. The climate-related risks align directly with two primary risk categories – strategic and operational. Specifically, these risks directly focus on 'Environmental, Social and Governance' (ESG) and 'Production and service disruption', but are also indirectly incorporated into many other risks across the framework.

#### How we manage our climate-related risks

As part of our risk management process, we have assigned key controls to manage both our climate change mitigation and adaptation risks.

The controls for our climate change mitigation GPR are in line with our strategy and regulatory frameworks and are also reflected throughout other relevant risks, for example: regulatory outcomes; political and societal expectations; and significant disruption of energy. The key overarching mitigation controls involve tracking progress against targets, identifying changes that could trigger additional transition risks, and implementing procedures and proposed solutions to overcome them.

Our key climate change adaptation controls include the following:

**• Fit for Future of Electricity Strategy:**

A corporate strategy that considers the steps to ensure our business remains resilient in the future, such as enhancing design standards, and investments on asset hardening and flood protection.

- **Engineers Governance forums:** Group Chief Engineer and engineering duty holders sharing guidance and data on key topics such as resilience.
- **Resilience and Asset Management Business Management Standard (BMS):** Sets out minimum requirements and a framework for resilience capability and managing asset risk to ensure each business unit is prepared for the next disruptive event.
- **Establishment of the Business Resilience and Crisis Management organisation:** Reporting to the Group Chief Engineer and Group Legal, this team is focused on building resilience to all threats and hazards. This includes the development of crisis management and business continuity plans, training, and exercises to help align and coordinate our response to severe weather and other crisis events; but is also leveraging innovative technologies to improve our intelligence, looking strategically at evolving risks associated with climate change. We are also expanding our network of external stakeholders to identify and leverage industry thought leadership and play an active role in shaping new policies and regulations.

#### Climate-related risks and opportunities and our strategic response

To assess the relative materiality, we established scope of impact, timeframe and likelihood for each risk and opportunity using internal analysis, market data and input from subject matter experts. The size and scope of each identified risk is assessed by considering the financial and reputational impacts, alongside how likely the risk is to materialise on a scale of 1-5 (as set out below). Higher risk scores are more likely to be deemed financially and strategically substantive. Our Group risks are rated on a scale of 1 to 5 across three categories.

The overall indicative risk score is calculated by multiplying likelihood by the greater of financial or reputational impact.

Rating	Financial – Group (£)	Reputation	Likelihood and descriptions	
<b>1</b>	<50m	<b>Internal</b> Minor impact on stakeholders within National Grid Group	<b>Remote</b> Frequency: <once in 20 years Probability: <10% chance	
<b>2</b>	50 – 100m	<b>Intra-Group (internal)</b> Major impact on stakeholders within National Grid Group	<b>Less likely</b> Frequency: <once in 15 years Probability: 10 – 40% chance	
<b>3</b>	100 – 300m	<b>Local 3rd Party (external)</b> Impact on local stakeholders	<b>Equally unlikely as likely</b> Frequency: <once in 10 years Probability: 40 – 60% chance	
<b>4</b>	300 – 500m	<b>National (external)</b> Impact on national stakeholders	<b>More likely</b> Frequency: <once in 5 years Probability: 60 – 80% chance	
<b>5</b>	>500m	<b>International (external)</b> Impact on stakeholders that could reasonably be visible on the wider international stage	<b>Almost certain</b> Frequency: <once a year Probability: >90% chance	

## Time horizons, scoring and probability

Guided by our scenario modelling, strategic planning, and risk management approaches articulated above, the climate-related risks and opportunities that pose a financially material impact to the Group are detailed below, along with our basis of measuring and responding strategically to each. We have only reported risks and opportunities financially material to the Group per the risk assessment scoring.

### Time horizons and probability

The timeframes we have used to assess the climate-related risks and opportunities are:



These time horizons largely align with our planning and forecasting processes timelines, with some buffers to reflect the regularity of updating scenarios:

- **Short:** In line with our annual planning and shorter-term budget processes.
- **Medium:** Reflects our strategic business planning process period.
- **Long:** Aligns with our longer-term emerging risk assessment timelines, up to the date of our net zero commitment.

Our 'likelihood' assessment is an indicative estimate of the probability for material financial impacts with reference to the following categorisation:



We use our ERM risk assessment scoring scale to categorise the likelihood of our climate change risks and opportunities.

## Our material climate-related risks and opportunities

**Risk/opportunity**

### 1. Transition Risk

#### Policy and Legal

**Demand for natural gas is expected to reduce**

Global momentum towards meeting net zero emissions continues to build, and the outlook for fossil fuels in the longer term is uncertain. Our US jurisdictions' pathways toward their decarbonisation targets indicate an increase in electric load growth and a reduction in gas heating demand, which has a bearing on our US gas business and the useful economic lives (UELs) of elements of our network assets. While we have sold a majority interest in UK Gas Transmission and Metering, and our remaining 20% interest is not treated as part of our continuing operations, reduced gas demand could impact the pace of electrification for our UK transmission and distribution businesses, flexibility requirements, and Grain LNG terminal returns.

**Business potentially affected:**  
New York, New England, NGV, UK ET, UK ED

**Timeframe (term):**

Short Medium Long

**Likelihood:**

Very low Low Moderate High Very high

**Measurement indicators:**

- Gas UEL sensitivities
- GHG emissions
- CTP

**Potential impact**

This risk mostly impacts our US business units. Massachusetts and New York have released their final plans to execute their respective decarbonisation targets, which indicate an accelerated programme towards electrification and a reduction in gas heating demand. These plans have been developed to inform future legislation. Accordingly, there is a risk that the UELs of certain elements of our gas networks may be shortened in line with future policy, regulatory frameworks and planning systems aimed to support the decarbonisation of the energy sector. However, states also acknowledge the value of backup heat sources, such as low-carbon gas, and recognise that there are operational constraints and uncertainties which could arise as parts of the gas system are decommissioned. The DS-DPU 20-80 ruling in Massachusetts mandates that costs for gas infrastructure can only be recovered if non-gas alternatives were considered first. This could (alongside other state policies) put downward pressure on gas demand, including RNG and hydrogen, leading to a risk of shortened UELs (if, for example, all the customers using gas on a section of the network moved to another heating source). In the UK, a reduction in gas demand could lead to greater levels of electrification, higher flexibility needs and headwinds for the Grain LNG terminal. We have performed sensitivity analysis to assess the impact on our Group financial results of shortening the UELs of our gas business assets, which for 2050 illustrates an unlikely worst-case scenario. This may result in an increase in depreciation expense of around £274 million to 2050 for US-regulated assets. Please refer to note 13 Property Plant and Equipment on page 162 – 165 for more details. This sensitivity calculation excludes any assumptions regarding the residual value of our asset base and the effect that shortening the asset depreciation lives would be expected to have on our regulatory recovery mechanisms.

**Our response**

We agree with the need to decarbonise energy networks, while seeing an important role for gas in the future, including the gas assets we own and operate today. However, the extent and nature of this role out to 2050 and beyond is subject to economic, technological, legal, and regulatory developments. In assessing the UELs of our gas network assets, we consider a range of different pathways which factor in the ability to decarbonise fuel, customer behaviour and the feasibility and affordability of electrification, in parallel with our net zero ambitions and those of the states we operate in. Based on our latest assessment, we continue to believe that these assets retain a crucial role in maintaining security, reliability and affordability of energy beyond 2025. Under our Clean Energy Vision we are pursuing zero fossil fuel gas and electric systems by 2050, if not sooner, in the US. The vision proposes a hybrid approach to heating that enables customers to have more affordable and practical choices to become fossil free. We are also advocating for the necessary standards that would allow us to start procuring and blending renewable natural gas and hydrogen and scale up our supplies to meet our emissions reduction targets. We continue to engage in key regulatory proceedings and processes in New York and Massachusetts to maximise recovery on our gas business assets. Our US fossil fuel powered electricity generation assets are currently expected to be materially depreciated by 2040, which aligns to New York's target to achieve zero emissions from electricity by 2040.



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

Risk/opportunity	Potential impact	Our response
<p><b>2. Transition Risk</b></p> <p><b>Market / Policy</b></p> <p><b>Uncertainty in the extent of electricity demand growth</b></p> <p>There is uncertainty about what replaces the reduction in fossil fuel gas in order to meet net zero and the extent to which electricity plays a part. Electricity use and share of final demand will need to expand significantly, with ever-increasing volumes of intermittent renewable energy.</p> <p>For example, a sudden political shift away from decarbonisation goals or clean energy infrastructure investment could reduce demand growth. Hydrogen could compete with electricity in certain use cases. Consumer behaviour or preferences could change.</p> <p>This could lead to a risk of either over- or under-expansion of our networks. Sudden changes in demand growth may also harm business cases made under different assumptions. If our UK and US electricity networks do not adapt appropriately to demand levels, there is a risk National Grid will not be able to ensure fair, affordable and reliable supply.</p> <p><b>Business potentially affected:</b> Group-wide</p> <p><b>Timeframe (term):</b></p> <p>Short      Medium      Long</p> <p>█</p> <p><b>Likelihood:</b></p> <p>Very low   Low   Moderate   High   Very high</p> <p>█</p> <p><b>Measurement indicators:</b></p> <ul style="list-style-type: none"> <li>• Network reliability</li> <li>• UK and US power networks</li> <li>• Capital expenditure</li> </ul>	<p>If we underestimate demand, there is a risk that the transmission and distribution networks we operate in the UK and US may not be equipped to deliver the significant electricity demand growth envisioned to achieve net zero.</p> <p>If we overestimate demand, there is a risk that we build surplus assets, losing consumer and regulator confidence.</p> <p>In the short term, failures could affect us through reputational damage and lost regulatory incentive income, which link directly to reliability. For example, in relation to UK ED, the Interruptions Incentive Scheme in RIIO-ED2 provides a 150bps upside incentive but a 250bps downside penalty on our return on regulatory equity earnings (RORE).</p> <p>Given this risk would likely materialise over the medium to long term, it is not possible to reliably quantify this risk at this time.</p>	<p>Accurate forecasts and clear policy commitments are key to managing this risk. We maintain several analytical teams and stakeholder relationships to anticipate the future as closely as we can.</p> <p>We use this proprietary analysis, combined with decades of experience in energy infrastructure development to undertake corporate advocacy, influencing for greater certainty and credibility in national policy. In Massachusetts, we have filed our ESMP with regulators which sets out a clear plan for a smarter, stronger, and cleaner grid at 5-year, 10-year, and long-term time horizons.</p> <p>We also support the development of a Strategic Spatial Energy Plan which sets out a clear pathway for the future of electricity transmission networks in GB. This provides clarity and certainty to communities, supply chains, and infrastructure owners.</p> <p>To help manage uncertainty in electricity demand growth, we continue to prioritise system flexibility at distribution level to make the best use of existing infrastructure. In the US, we have created the Flexible Connections team, a cross-functional effort seeking to improve reliability and shorten interconnection times. Massachusetts is nearly at grid capacity and therefore the urgency for Flexible Connections is a priority for enabling the energy transition. Through National Grid's innovative pilot programme, we have been able to identify new opportunities and confirm our capacity needs for clean energy interconnections.</p> <p>In the UK, to mitigate the risk of overbuild, we work closely with system planners. In UK ED, we have stood up a governance panel for the DSO. The DSO is charged with ensuring all network build carried out by UK ED is absolutely essential and that all other options for deferral (such as flexibility) have been considered first. To mitigate the risk of under-build if demand is higher than expected, we are making no-regret anticipatory investment to meet demand for connections in the US and UK.</p> <p>We regularly measure and report our network reliability across transmission, distribution and interconnection networks (see page 19).</p>

Risk/opportunity

### 3. Transition Opportunity Markets

#### Increased demand for electricity, even in our slowest decarbonising scenarios

The changing energy system opens up new opportunities and market segments.

National Grid is well positioned to capitalise on the huge growth opportunities associated with the increased demand for electricity and to decarbonise gas networks in the US.

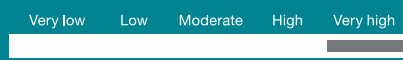
Through smart investment, advocacy and proactive market engagement, National Grid can succeed in new and existing growth markets, develop new products and services and scale existing technologies.

**Business potentially affected:**  
Group-wide

**Timeframe (term):**



**Likelihood:**



**Measurement indicators:**

- Network reliability
- Renewable capacity additions
- Proportion of renewables in energy mix
- EU Taxonomy green capex ratio
- Investment in research and development (R&D)
- National Grid Partners capital investment

Potential impact

Even though the extent of electrification is uncertain, growth in electricity networks is certain and underpinned by the plans published by the US states that we operate in and within our licence for ASTI in the UK.

As we move toward a decarbonised energy system comprising a greater volume of decentralised, intermittent energy sources, we expect growth in flexibility markets, renewable generation and interconnection.

Our NGV business has the potential to benefit from significant investment opportunities in both the UK and US, regarding interconnectors and competitive transmission. National Grid has the opportunity to influence the location, extent and commerciality of network build.

In the UK, the government is targeting 50 GW of offshore wind capacity by 2030 and investing around £20 billion of transmission network projects. By 2050, GB offshore wind capacity may exceed 100 GW and connecting this could drive significant growth opportunities for our businesses.

There are also potential opportunities for our Group entities to partner with organisations in the development of innovative low-carbon gas alternatives, OHA, and long-term electricity storage, though we are not currently permitted to do the latter in the UK.

Taking advantage of these opportunities would lead to significantly higher capital investment and growth. This ultimately increases Group profit and EPS. We plan to invest around £60 billion in the five year period from April 2024 to March 2029 which will contribute towards achieving the Group's Underlying EPS CAGR of 6-8% in the period 2023/24 – 2028/29.

Following our strategic portfolio pivot, around 70% of our revenues are derived from electricity, and we are therefore well placed to maximise these opportunities.

Our response

In order to maximise these opportunities we are evolving our strategy to focus on networks and streamlining our business. As part of this, on 23 May 2024, we will be announcing the sale of Grain LNG our UK LNG business and National Grid Renewables, our US onshore renewables business. We have also set out an ambitious Green Capex commitment of £51 billion across the five-year period from April 2024 to March 2029.

To deliver the magnitude of new infrastructure needed to decarbonise the UK power system, our Strategic Infrastructure business unit is working to build the 17 major projects required to connect a significant growth in offshore wind under the ASTI framework.

Through targeted green investment and the widespread rollout of flexibility services, UK ED is preparing for over a million electric vehicles, around 300,000 heat pumps, and a significant ramp-up in renewable energy generation connections over the ED2 price control.


In New England, we submitted our Electric Sector Modernization Plan (ESMP) to the Massachusetts Department of Public Utilities, outlining the investments needed in the electric distribution system to meet increased electricity demand in line with the state's climate change, clean energy and equity goals. In New York, we plan to invest approximately \$4 billion through the Upstate Upgrade, which sees us embarking on at least 70 projects through 2030 to ensure the grid can meet growing electric demand.

NGV continues to innovate on interconnection, developing plans for OHA, connecting offshore wind clusters in the UK to neighbouring countries. By 2035, this total is expected to grow to between 15 GW and 24 GW, which presents a major opportunity for NGV.

In the US, NY Transco (an NGV joint venture with Avangrid, Central Hudson and Con Edison) has partnered with the New York Power Authority on the 90 mile Propel NY Energy electric transmission project, which was selected by the NYISO to help inject more clean energy from offshore wind into the grid.

Through National Grid Partners, we incubate and invest in start-ups at the intersection of energy and emerging technology. It now invests in 46 companies and four limited partner investments in strategic venture funds.

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

Risk/opportunity	Potential impact	Our response
<p><b>4. Transition Risk</b>  <b>Reputation and Deliverability</b></p> <p><b>There are several factors which affect our ability to deliver our commitments, including supply chain, talent and finance</b></p> <p>The size of the task to deliver clean, fair and affordable energy is immense and unprecedented. There are significant risks to delivery.</p> <p>Failing to play our crucial role in delivering the emissions reduction targets of the jurisdictions that we operate in risks the wider decarbonisation goals in the societies we serve.</p> <p>There is also a risk that we fall short of our own stretching GHG emissions targets and commitments. Missing our own targets and commitments risks the credibility we have with our investors, regulators and other stakeholders.</p> <p><b>Business potentially affected:</b>            Group-wide</p> <p><b>Timeframe (term):</b></p> <p>Short      Medium      Long</p>  <p><b>Likelihood:</b></p> <p>Very low    Low    Moderate    High    Very high</p>  <p><b>Measurement indicators:</b></p> <ul style="list-style-type: none"> <li>• Network reliability</li> <li>• Renewable capacity additions</li> <li>• Proportion of renewables in energy mix</li> <li>• EU Taxonomy-aligned capital expenditure</li> <li>• Customer satisfaction (US)</li> <li>• Cumulative green bonds on issue</li> <li>• IFRS 8 capital investments</li> </ul>	<p>Our businesses in the US and UK both depend on, and compete in, a global market for green finance, supply chains and talent.</p> <p>Failing to deliver the major network reinforcement required to meet government renewable installation targets, failing to make a compelling case for investment or failing to meet our own emissions reduction targets could undermine our corporate strategy, making it difficult to attract capital and resulting in materially lower financial performance. Our share price and EPS projections could be impacted due to loss of incentives or incurrence of penalties. However, it is not possible to reliably measure the impact at this time.</p> <p>It could also damage our relationships with our trusted stakeholders, including our investors, regulators and customers, and potentially position National Grid as an obstacle rather than an enabler in the net zero transition. Every sector of the economy relies on the energy sector to enable its own decarbonisation plans, and for our customers, the ability to connect to our transmission and distribution networks in a timely manner is critical.</p> <p>Given this risk would likely materialise over the medium to long term, it is not possible to reliably quantify this risk at this time.</p>	<p>We embed climate-related targets into our business unit performance management processes with internal reporting of performance against targets. Emissions reduction targets are also embedded into the incentive arrangements and plans for Executive Directors and the Senior Leadership Group (see page 98).</p> <p>The Group has a detailed CTP, updated in 2024 and due to be published in due course, which sets out our revised roadmap to a vision of reaching net zero, and as close to 'real zero' as possible. We continue to work closely with stakeholders, including regulators, to ensure policy and regulatory frameworks enable and facilitate our net zero plans.</p> <p>We have also established a strategic priority to 'build tomorrow's workforce today' to ensure we have the talent we need to deliver the transition. In recognition of the importance of a pipeline of skilled, diverse talent to solve the problems of the future, we have made it an explicit strategic priority to build tomorrow's workforce, today, delivering 1,607,512 hours of training in 2023/24.</p> <p>In the UK, we have launched The Great Grid Upgrade, a major procurement initiative aimed at delivering the largest overhaul of the grid in generations. In May 2023, National Grid announced the first phase of supply chain partnership opportunities under the initiative, seeking partners for £4.5 billion worth of network construction, including for design, consenting and construction of assets such as new overhead lines and substations. We have also revisited our procurement strategy to secure our position in the supply chain and ensure we are well positioned to deliver our ambitious capital investment plan.</p> <p>We also engage with our top suppliers by emissions to establish action plans and commitments towards a Science Based Target (see page 38).</p>

**Risk/opportunity**

## 5. Physical Risk

### Increased frequency of extreme weather incidents and changing long-term climate trends

**Acute**  
Our assets are at risk of physical impacts from increased frequency of extreme weather events such as storms and flooding, leading to asset damage and operational risks.

**Chronic**  
Our assets are at risk of physical impacts from changing climate trends in the longer term, including increased frequency and severity of coastal flooding, high temperature, extreme wind, wildfires and low temperature, exposing us to asset damage and operational risks.

**Business potentially affected:**  
Group-wide

**Timeframe (term):**

Short      Medium      Long

**Likelihood:**

Very low      Low      Moderate      High      Very high

**Measurement indicators:**

- Network reliability
- Major storm costs
- CCRT outputs
- Research outputs from innovation projects

**Potential impact**

We experience significant costs because of asset damage and operational interruptions due to major storms, with £226 million (2022/23: £258 million) incurred in the year. Under our regulatory frameworks, such costs are typically recoverable in future years. More details on our major storm costs can be found on page 243 in the 'Other unaudited financial information' section.

Insurance premiums could also increase in order to cover such events.

These incidents are likely to increase in line with the increasing likelihoods illustrated by the IPCC, and associated costs are expected to grow accordingly, unless climate adaptation is appropriately measured and implemented.

**Our response**

Our Climate Vulnerability Steering Committee and working groups conducted a Group-wide CVA for energy-carrying assets. This programme is leveraging our Climate Change Risk Tool analysis to identify long-term climate hazard risks to our energy infrastructure. We are utilising our findings to develop tailored climate change adaptation plans across our business, outlining solutions for our high-risk assets and confirm the strategic approach to managing those risks.

In the year, Niagara Mohawk Power Corporation also filed its Climate Change Resilience Plan with the NYPSC, proposing incremental capital resilience investments to address priority vulnerabilities arising as a result of changing long-term climate trends.

In the UK, we have commenced a set of innovation projects to understand the impacts of climate change hazards on our asset performance.

We continue to invest in climate adaptation across the Group in the form of storm hardening and flood defences, with a further £30 million (2022/23: £31 million) invested in the year.

**Net impact**

On balance of the different pathways and even under the worst-case scenarios considered, none of the risks identified threaten the resilience of the Group and we are in a strong position to adapt our portfolio to maximise the opportunities of the energy transition. The momentum behind decarbonisation targets makes growth of electrification certain, even in our most pessimistic scenarios, but there are still a wide range of possibilities for the future. We must influence to reduce uncertainty and build in resilience to weather the risks we cannot control.

## 4. Metrics and targets

In this section, we outline our carbon emissions performance targets and metrics linked to our material climate change risks and opportunities.

Our overall climate commitment is to become a net zero business across Scope 1, 2 and 3 GHG emissions by 2050, as established in our CTP. In order to achieve this goal, we have set ourselves a set of ambitious short- and medium-term targets in our RBC, some of which were updated in our CTP. Our targets directly linked to climate change are included in the table on page 58.

A complete index of the quantitative measurement indicators used to manage each climate-related financial risk and opportunity, in line with our strategy and risk management process, is set out on page 58. We know that achieving our emission reduction targets is dependent on the development and evolution

of policy, regulatory frameworks and planning systems which support the decarbonisation of the wider energy sector.

We continually review our metrics and targets 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 addition to the metrics laid out on the following page, we have disclosed the proportion of our IFRS revenue, operating expenditure and capital expenditure that align with the climate change mitigation and adaptation objectives of the EU Taxonomy delegated acts.

Given the climate change mitigation objective's alignment to the principles of the Paris Agreement, the disclosures provide a transparent view of the Group's compatibility with the net zero goals of the jurisdictions we served during the year ended 31 March 2024.

More details of this year's climate change adaptation costs can be found in our EU Taxonomy Report in the RBR section of our website at: [nationalgrid.com/responsibility](https://nationalgrid.com/responsibility).

A significant proportion of our Scope 1 emissions are subject to a traded market carbon price or non-traded cost of carbon through our regulatory price controls. In the UK, Scope 1 emissions at Grain LNG terminal are subject to the UK Emissions Trading Scheme and in the US emissions from our Long Island Power Generation plant are subject to the Regional Greenhouse Gas Initiative. We have a regulatory incentive to reduce Scope 1 SF<sub>6</sub> emissions in the UK that utilise a non-traded cost of carbon as part of the incentive calculation.



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

While we have found the practice useful in terms of increasing our understanding of the carbon impact of the decisions we make, it has not had a significant impact on decision-making to date. Carbon pricing is only one of the tools that we are using to reduce the carbon impact of our business' investment decisions, alongside policy drivers, commitments and carbon reduction methodologies such as the use of a carbon weighting in the competitive tender process for construction projects.

The limited scope assurance opinion received over our most material sustainability metrics can be found on the RBR section of our website at: [nationalgrid.com/responsibility](https://nationalgrid.com/responsibility).

Further, we are assessing the impacts of the new standards issued by the International Sustainability Standards Board (ISSB) which provide a comprehensive global baseline of sustainability-related disclosure standards, as well as the SEC climate rules and UK Greening Finance roadmap.

Whilst we currently leverage the TCFD, covered in this report, and GRI and SASB frameworks in the respective GRI and SASB reports, to maximise the comparability and usefulness of our reporting, we are encouraged to see advancement to further align sustainability reporting disclosures.

### GHG emissions across our value chain<sup>1</sup>



- ◆ Combustion of natural gas directly sold and delivered by National Grid **51%**
- ◆ US Sold Electricity **9%**
- ◆ Fossil fuel generation **8%**
- ◆ Electricity line losses **8%**
- ◆ Purchased goods and services **12%**
- ◆ Other<sup>2</sup> **12%**

1. Rounded to the nearest 1%. Calculated based upon the 2023/24 Scope 1, 2 and 3 emissions from each area. This excludes third-party Sold Gas, a US-only emission, which are downstream emissions associated with the combustion of natural gas delivered through our network but sold by a company other than National Grid. This differs from Scope 3 Cat. 11 GHG Protocol guidance, which otherwise advises to consider only the end use of goods sold by the reporting company itself. Refer to RBR reporting methodology for calculation details: [nationalgrid.com/responsibility/responsible-business-report](https://nationalgrid.com/responsibility/responsible-business-report)
2. Other includes natural gas emissions from fugitives and venting, SF<sub>6</sub> emissions, business travel and other sources.

### Index of climate-related quantitative measurement indicators<sup>1</sup>

	2023/24	2022/23
<b>SBTi validated GHG emission reduction targets</b>		
Reduce absolute Scope 1 and 2 GHG emissions by 60% by 2030 <sup>2,3</sup>	<b>(11.8)%</b>	
Reduce absolute Scope 1 and 2 GHG emissions excluding generation by 50% by 2030 <sup>2,3</sup>	<b>(14.4)%</b>	
Reduce the carbon intensity of our power generation (Scope 1 GHG emissions) by 90% by 2030, and by 92% by 2033 <sup>3</sup>	<b>(34.7)%</b>	
Reduce the carbon intensity of our power generation and Sold Electricity (Scope 1 and Scope 3 GHG emissions) by 86% by 2033 <sup>3</sup>	<b>(15.4)%</b>	
Reduce absolute GHG emissions for all Scope 3, excluding Sold Electricity, by 37.5% by 2033 <sup>4</sup>	<b>0.8%</b>	
Reduce absolute GHG emissions from gas sold by third-parties by 37.5% by 2033 <sup>4,5</sup>	<b>(17.6)%</b>	
<b>Key climate-related metrics</b>		
Scope 1 GHG emissions (ktCO <sub>2</sub> e)	<b>3,988</b>	4,408 <sup>6</sup>
Scope 2 GHG emissions (ktCO <sub>2</sub> e, location based)	<b>2,864</b>	2,876
Total Scope 1 and 2 GHG emissions <sup>2</sup> (ktCO <sub>2</sub> e)	<b>6,852</b>	7,284 <sup>6</sup>
Scope 3 GHG emissions (ktCO <sub>2</sub> e)	<b>27,384</b>	27,867 <sup>6</sup>
Total Scope 1, 2 and 3 GHG emissions <sup>2</sup> (full value chain) (ktCO <sub>2</sub> e)	<b>34,236</b>	35,151
Intensity ratio: Scope 1 and 2 GHG emissions <sup>2</sup> per million of revenue (tCO <sub>2</sub> e/£m)	<b>345</b>	337
Climate change adaptation capex (EU Taxonomy aligned activities, £m)	<b>30</b>	31
Climate change mitigation capex (EU Taxonomy aligned activities, £m)	<b>5,962</b>	5,526
Group energy consumption from fossil fuel generation (MWh)	<b>14,375,199</b>	15,892,188
Group energy of electricity systems line losses (MWh)	<b>14,518,894</b>	15,746,136
Group energy consumption excluding fossil fuel generation and electricity systems line losses (MWh)	<b>2,547,139</b>	2,834,621
UK energy of electricity systems line losses (MWh)	<b>10,046,000</b>	10,392,450
UK energy consumption excluding electricity systems losses (MWh)	<b>1,297,104</b>	1,769,977
UK Scope 1 GHG emissions (ktCO <sub>2</sub> e)	<b>377</b>	398
UK Scope 2 GHG emissions <sup>2</sup> (ktCO <sub>2</sub> e)	<b>2,113</b>	2,094
Total UK Scope 1 and 2 GHG emissions <sup>2</sup> (ktCO <sub>2</sub> e)	<b>2,490</b>	2,492

2023/24 data externally assured by PwC.

1. Refer to RBR reporting methodology for calculation details: [www.nationalgrid.com/responsibility/responsible-business-report](https://www.nationalgrid.com/responsibility/responsible-business-report). Target year 20Yn indicates that the performance will be reported in the financial year that aligns with the year 20Yn/Yn+1.
2. Includes Scope 2 location based emissions only.
3. Near-term target approved by Science Based Targets initiative (SBTi) and aligned to the Paris Agreement and a 1.5°C pathway. GHG targets are against a financial year 2018/19 baseline.
4. Near-term target approved by SBTi and aligned to a well below 2°C pathway. GHG targets are against a financial year 2018/19 baseline.
5. Third Party Sold Gas, a US-only emission, are downstream emissions associated with the combustion of natural gas delivered through our network but sold by a company other than National Grid. This differs from Scope 3 Cat. 11 GHG Protocol guidance, which otherwise advises to consider only the end use of goods sold by the reporting company itself.
6. In setting our new near-term SBTi approved targets, we follow the WRI/WBCSD GHG Protocol guidance and recalculated our new baseline (2018/19), aligning with our Recalculation Policy. This includes recalculating 2022/23 comparative figures to reflect improved calculation methodology.

Note: The above data together with our "Climate change – Scope 1, 2 and 3 emissions" KPIs on page 19 is responsive to the UK government's Streamlined Energy and Carbon Reporting (SECR) requirements. We have split out our Group energy consumption into constituent parts for great transparency. Fuels consumed for power generation on behalf of LIPA, the contracting body is shown separately because energy consumption related to power generation can vary greatly year-on-year and is determined by LIPA.

# Non-financial and sustainability information statement

This page contains disclosures in compliance with sections 414CA and 414CB of the Companies Act 2006 (including the new climate-related financial disclosures).

The information listed below is incorporated by cross-reference.



## Environmental matters

page 37  
pages 44 – 58

## Our employees

pages 18 – 21  
page 40  
pages 84 – 85  
page 239

## Social matters

pages 37 – 41

## Human rights

page 41  
page 239

## Anti-corruption and anti-bribery

page 41



## Business model

pages 4 – 5

## KPIs

pages 18 – 21

## Our stakeholders

pages 42 – 43

## Audit & Risk Committee report

pages 90 – 95

## People & Governance Committee report

pages 88 – 89

## Safety & Sustainability Committee report

page 96

## TCFD

pages 44 – 58

## Risks

pages 22 – 30



Further information can be found in our RBR which will be published online in due course.

Further reading	Environment	Social matters and employees	Anti-corruption and bribery	Human rights
Our policies and due diligence	10 – 16	21 – 39	41	24 – 28
Outcomes	33 – 36	33 – 36	33 – 36	33 – 36

## Climate-related financial disclosures as required by sections 414CA and 414CB of the Companies Act 2006

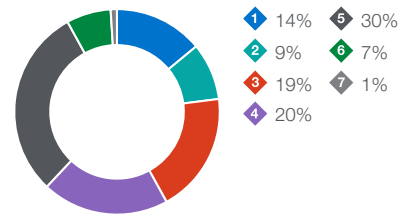
A description of the company's governance arrangements in relation to assessing and managing climate-related risks and opportunities.	pages 45 – 46
A description of how the company identifies, assesses, and manages climate-related risks and opportunities.	pages 47 – 53
A description of how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management process.	page 52
A description of (i) the principal climate-related risks and opportunities arising in connection with the company's operations, and (ii) the time periods by reference to which those risks and opportunities are assessed.	pages 53 – 57
A description of the actual and potential impacts of the principal climate-related risks and opportunities on the company's business model and strategy.	pages 16 – 17, 53 – 57
An analysis of the resilience of the company's business model and strategy, taking into account consideration of different climate-related scenarios.	pages 47 – 51
A description of the targets used by the company to manage climate-related risks and to realise climate-related opportunities and of performance against those targets.	pages 19, 57 – 58
The key performance indicators used to assess progress against targets used to manage climate related risks and realise climate-related opportunities and a description of the calculations on which those key performance indicators are based.	pages 57 – 58

## 1.

### Revenue and profits

The vast majority of our revenues are set in accordance with our regulatory agreements (see pages 220 – 225) and are calculated based on a number of factors including investment in network assets, performance on incentives, allowed returns on equity and cost of debt, and customer satisfaction.

#### Revenue (%)

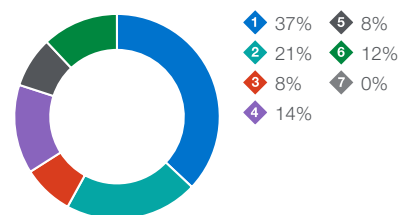


## 2.

### 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 operating 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.

#### Statutory operating profit (%)

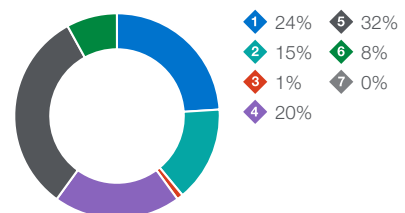


## 3.

### Investment

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

#### Capital investment (%)



#### Capital allocation

Our capital allocation is determined by the need to make the investments and outputs required under our regulatory frameworks in the UK and US (which accounted for over 90% of our capital investment in 2023/24), balanced with the desire to invest in our other businesses, such as NGV, which may achieve higher growth. The investments we make seek a balance between the continued growth of our core regulated operations and investments in our non-regulated NGV businesses, while ensuring we continue to deliver a sustainable and progressive dividend to our shareholders.

- 1 UK Electricity Transmission (UK ET)
- 2 UK Electricity Distribution (UK ED)
- 3 UK Electricity System Operator (ESO)
- 4 New England
- 5 New York
- 6 National Grid Ventures (NGV)
- 7 Other activities

## Summary of Group financial performance for the year ended 31 March 2024

Statutory EPS<sup>1</sup>

# 60.0p

2022/23  74.2p  
2021/22  60.0p

Underlying EPS<sup>1</sup>

# 78.0p

2022/23  74.5p  
2021/22  69.0p

Group RoE

# 8.9%

2022/23  11.0%  
2021/22  11.4%

Asset growth

# 9.7%

2022/23  11.4%  
2021/22  8.7%

1. From continuing operations

### Financial summary for continuing operations

£m	2023/24	2022/23	Change
<b>Accounting profit:</b>			
Gross revenue	19,850	21,659	(8%)
Other operating income	12	989	(99%)
Operating costs	(15,387)	(17,769)	(13%)
Statutory operating profit	4,475	4,879	(8%)
Net finance costs	(1,464)	(1,460)	—%
Share of joint ventures and associates	37	171	(78%)
Tax	(831)	(876)	(5%)
Non-controlling interest	(1)	—	—%
Statutory IFRS earnings (note 8)	2,216	2,714	(18%)
Exceptional items and remeasurements (after tax)	884	(379)	n/m
Timing and major storm costs (after tax)	(523)	214	n/m
Deferred tax on underlying profits in NGET and NGED	302	178	n/m
Underlying earnings <sup>1</sup>	2,879	2,727	6%
EPS – statutory IFRS (note 8)	60.0p	74.2p	(19%)
EPS – underlying <sup>1</sup>	78.0p	74.5p	5%
Dividend per share	58.5p	55.4p	6%
Dividend cover – underlying <sup>1</sup>	1.3	1.3	—%
<b>Economic profit:</b>			
Value Added <sup>1</sup>	2,931	4,807	(39%)
Group RoE <sup>1</sup>	8.9%	11.0%	-210bps
<b>Capital investment and asset growth:</b>			
Capital investment (note 2 (c)) <sup>2</sup>	8,235	7,593	8%
Asset growth <sup>1</sup>	9.7%	11.4%	-170bps
<b>Balance sheet strength:</b>			
RCF/adjusted net debt (Moody's) <sup>1</sup>	9.2%	9.3%	-10bps
Net debt (note 29)	43,607	40,973	6%
Add: held for sale net debt	(23)	—	n/m
Net debt (including held for sale) <sup>1</sup>	43,584	40,973	6%
Group regulatory gearing <sup>1</sup>	69%	71%	-200bps

1. Non-GAAP alternative performance measures (APMs) and/or regulatory performance measures (RPMs). For further details see 'Other unaudited financial information' on pages 242 – 256. 'Underlying' definition has been updated to also exclude deferred tax in NGET and NGED. Comparatives periods have been restated.

2. Prior year comparatives have been restated to reflect the change in our 'capital investment' definition (an alternative performance measure, or APM), which now comprises: additions to property, plant and equipment and intangible assets, equity contributions to joint ventures and associates and capital expenditure prepayments made during the period; but no longer includes the Group's investments by National Grid Partners. This definition now aligns with our statutory segmental disclosure of capital investment in note 2(c) to the financial statements and as such, is no longer considered to be an APM.

### 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.

Our business performance as set out in our regulatory agreements can differ from accounting under IFRS, principally because our regulators allow for regulatory deferral accounting. Our allowed revenues are set in accordance with our regulatory price controls or rate plans.

Prices are set and charged to customers based on the estimated volume of energy expected to be delivered to achieve the allowed revenue for that year. Where actual volumes delivered differ from those estimates, that results in an over- or under-collection of revenues compared with our allowances. We call these 'timing' differences. The same applies to revenues from pass-through costs (e.g. commodity and energy-efficiency costs) which are fully recoverable from customers.

Our reported underlying profit excludes major (deferrable) storm costs if these exceed a predetermined threshold in a year and are eligible for future recovery under regulatory agreements and also now excludes deferred tax on underlying profits in our regulated businesses (NGET and NGED) reflecting that our allowed UK regulated revenues are based on corporation tax payments and not on a total tax charge. This change has been made following the 'full expensing' capital allowance regime being made permanent during the year. Comparative amounts have been restated accordingly. Underlying results also exclude significant exceptional items, and commodity and financial derivative remeasurements, as defined in our accounting policies.

We explain the basis of these measures and, where practicable, reconcile these to statutory (i.e. GAAP) results in Other unaudited financial information on pages 242 – 256. Our RPMs have been calculated for the total Group (or individual entities where relevant) and these are not based on IFRS measures.

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

- **Accounting profit:** In addition to statutory IFRS measures we report adjusted results (i.e. before exceptional items and remeasurements), and underlying results, which further take account of: (i) volumetric and other revenue timing differences arising from our regulatory contracts; (ii) major storm costs, which are recoverable in future periods; and (iii) deferred tax in our UK regulated businesses (NGET and NGED). 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.
- **Capital investment and asset growth:** Capital investment comprises our additions to PP&E and intangible assets (excluding acquisitions), investments in joint ventures and associates, along with net movements in capex prepayments. Asset growth represents the year-on-year increase in RAV and US rate base in our regulated businesses, plus the increase in net assets (excluding certain balances such as pensions, net debt and deferred taxes) in our non-regulated businesses, but excluding the impact of currency movements.
- **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. Group regulatory gearing measures our Group net debt as a proportion of the Group's assets that are used to measure asset growth. This includes balances for businesses classified as held for sale under IFRS.



## Financial review continued

This balanced range of measures of financial wellbeing informs our dividend policy which, following the rebasing of the 2023/24 dividend per share (DPS) following the Rights Issue, aims to grow annual DPS in line with UK CPIH, thus maintaining the DPS in real terms.

### Financial summary for continuing operations

**Accounting profit:** Statutory IFRS earnings from continuing operations were £2,216 million in 2023/24, £498 million (18%) lower than last year (2023: £2,714 million) due to a variety of different components. Statutory earnings were adversely impacted by £1,011 million exceptional net charges before tax in 2023/24 (including a £496 million environmental provision in New York and a £498 million provision in UK Electricity System Operator for estimated timing over-recoveries expected to be transferred through the disposal process in 2024/25), compared with a favourable impact from £935 million exceptional net gains in the prior year. These were partly offset by £290 million favourable year-on-year remeasurements of commodity and financial derivatives, £945 million favourable year-on-year revenue timing over-recoveries, the net impact of tax on all these items, along with an improvement in underlying business performance for the Group. Statutory EPS for continuing operations of 60.0p was 14.2p lower than the prior year. The net exceptional charge of £852 million (2023: £619 million net gain) and remeasurement losses of £32 million (2023: £240 million net losses) are explained in further detail in note 5 to the financial statements.

Our 'adjusted' results exclude the impacts from exceptional items and remeasurements as explained on page 67. In 2023/24, adjusted earnings from continuing operations were £3,100 million up £765 million, or 33% from the prior year. Adjusted earnings in 2023/24 included a timing over-recovery after tax of £688 million (2023: £26 million under-recovery) and major storm costs (after tax) of £165 million (2023: £188 million). As a result adjusted operating profit of £5,462 million was up £1,168 million (2023: £4,294 million). Adjusted net finance costs of £1,479 million were £35 million lower, benefiting from lower inflation. Share of profits from joint ventures and associates of £101 million was down £89 million related to high interconnector revenues in the prior year. Adjusted tax of £983 million was £348 million higher, primarily driven by higher profits and the increase in the UK corporation tax rate.

As explained in our Performance Management Framework on page 61, our 'underlying' results exclude the total impact of exceptional items, remeasurements, timing, major storm costs and deferred tax in UK regulated businesses (NGET and NGED). A reconciliation between these alternative performance measures and our statutory performance is detailed on page 61 and on pages 242 – 256.

Underlying operating profit for continuing operations was up 4% (6% at constant currency), driven by higher allowed revenues in UK Electricity Transmission, rate increases in KEDNY/KEDLI and NIMO along with lower controllable costs in New York, and the benefit of held for sale accounting treatment within UK Electricity System Operator. Partly

offsetting these factors, UK Electricity Distribution performance was lower, driven by lower incentives under the ED-2 price control and National Grid Ventures operating profit was lower as a result of lower revenues at our IFA1 interconnector. New England profits were broadly comparable, with the prior year including two months' profit in respect of our Rhode Island business which was disposed in May 2022. Our joint ventures and associates' contribution reduced (mainly UK interconnector revenues). Net financing costs were marginally lower as the impact of inflation on index-linked debt reduced alongside the impact of the bridge loan held last year as part of our strategic pivot; partly offset by the impact of higher interest rates. Other interest was adverse year on year. Underlying profit after tax increased by 6% (7% increase at constant currency) and resulted in a 5% increase (6% increase at constant currency) in underlying EPS to 78.0p.

**Economic profit:** From an economic profit perspective, our Group regulatory performance measure of Value Added decreased from £4,807 million to £2,931 million principally driven by lower RAV indexation and lower National Grid Ventures and other profits. Group RoE for 2023/24 was 8.9%, lower than the 11.0% achieved in the prior year.

**Capital investment and asset growth:** Capital investment of £8,235 million was £642 million (8%) higher than 2022/23, or £805 million (11%) higher at constant exchange rates, driven by increased investment in UK Electricity Transmission, driven by the Accelerated Strategic Transmission Investment (ASTI) programme, increased capital expenditure in New York, New England and UK Electricity Distribution, partly offset by lower investment in National Grid Ventures (following prior year investment on Viking, Grain LNG and IFA1). Higher capital investment partly offset by reduced year-on-year RAV indexation from lower inflation resulted in asset growth of 9.7% in the year (2023: 11.4%).

**Balance sheet strength:** Net debt increased from £41.0 billion at March 2023 to £43.6 billion at March 2024. Regulatory gearing was also lower at 69% (2023: 71%) and our calculation of Moody's RCF/adjusted net debt credit metric was 9.2%, a reduction of 10bps compared with 2022/23 and above the current rating threshold of 7.0%.

**Efficiency programme:** As part of our Group efficiency savings programme, we have achieved a further £139 million of savings in 2023/24. This is in addition to the £374 million of savings reported in prior years. In aggregate we have delivered savings of £513 million, exceeding the target of £400 million savings by the end of 2023/24 that we announced in November 2021.

### Dividend

The recommended full-year dividend per share of 58.52p is in line with our dividend policy of increasing in line with UK CPIH inflation and is covered 1.3 times by underlying EPS.

## Profitability and earnings

In calculating adjusted profit measures, where we consider it is in the interests of users of the financial statements to do so we exclude certain discrete items of income or expense that we consider to be exceptional in nature. The table below reconciles our statutory profit measures for continuing operations, at actual exchange rates, to adjusted and underlying versions. Further information on exceptional items and remeasurements is provided in notes 2, 5 and 6 to the financial statements.

### Reconciliation of profit and earnings from continuing operations

£m	Operating profit			Profit after tax			Earnings per share		
	2023/24	2022/23	Change	2023/24	2022/23	Change	2023/24	2022/23	Change
<b>Statutory results</b>	<b>4,475</b>	4,879	(8%)	<b>2,217</b>	2,714	(18%)	<b>60.0p</b>	74.2p	(19%)
Exceptional items	<b>1,011</b>	(935)	n/m	<b>852</b>	(619)	n/m	<b>23.1p</b>	(16.9p)	n/m
Remeasurements	<b>(24)</b>	350	n/m	<b>32</b>	240	n/m	<b>0.9p</b>	6.5p	n/m
<b>Adjusted results</b>	<b>5,462</b>	4,294	27%	<b>3,101</b>	2,335	33%	<b>84.0p</b>	63.8p	32%
Timing	<b>(915)</b>	30	n/m	<b>(688)</b>	26	n/m	<b>(18.6p)</b>	0.7p	n/m
Major storm costs	<b>226</b>	258	(12%)	<b>165</b>	188	(12%)	<b>4.4p</b>	5.2p	(15%)
Deferred tax in NGET and NGED	<b>—</b>	—	—%	<b>302</b>	178	70%	<b>8.2p</b>	4.8p	70%
<b>Underlying results</b>	<b>4,773</b>	4,582	4%	<b>2,880</b>	2,727	6%	<b>78.0p</b>	74.5p	5%

## Timing over/(under)-recoveries

In calculating underlying profit, we exclude regulatory revenue timing over- and under-recoveries, major storm costs (defined below) and deferred tax on underlying results of our UK regulated business (NGET and NGED), also 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. These variances between allowed and collected revenues and timing of revenue collections for pass-through costs give rise to 'timing' over- and under-recoveries.

The following table summarises management's estimates of such amounts for the two years ended 31 March 2024 for continuing and discontinued operations. 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, and are translated at the 2023/24 average exchange rate of \$1.26:£1.

£m	2023/24	2022/23 <sup>1</sup>
Balance at start of year (restated)	39	(60)
In-year over/(under)-recovery (continuing)	915	(30)
In-year over/(under)-recovery (discontinued)	—	12
Disposal of UK Gas Transmission/NECO	—	131
<b>Balance at end of year</b>	<b>954</b>	<b>53</b>

1. March 2023 balances restated to correspond with 2022/23 regulatory filings and calculations.

In 2023/24, we experienced timing over-recoveries of £363 million in UK Electricity Transmission, under-recoveries of £159 million in UK Electricity Distribution, over-recoveries of £800 million in UK Electricity System Operator (BSUoS revenues have been significantly more than system balancing costs following the introduction of fixed price tariffs), under-recoveries of £69 million in New England, and under-recoveries of £20 million in New York. 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 and allowances) are recoverable under our rate plans but are expensed as incurred under IFRS. Accordingly, where the net total cost incurred exceeds \$100 million in any given year, we exclude the net costs from underlying earnings. In 2023/24, we incurred deferrable storm costs, which are eligible for future recovery of \$285 million (2023: \$314 million).

## Deferred tax in UK regulated businesses

We also exclude deferred tax in our UK regulated businesses (NGET and NGED). In the 2023 Spring budget, the UK government introduced 'full expensing' tax relief for qualifying capital expenditure to encourage greater levels of investment from businesses. This change became permanent in November 2023. To represent underlying profitability more closely aligned to our regulatory agreements, and to align with UK peers, we will now report underlying earnings and underlying EPS excluding the impact of deferred tax in our UK regulated businesses (NGET and NGED). This change in calculation of underlying results has been applied to comparative periods. In 2023/24, we excluded £302 million (2023: £178 million) of deferred tax charges from our underlying results.

## Segmental operating profit

The tables below set out operating profit on statutory, adjusted, and underlying bases, all of which exclude the £4.8 billion gain on disposal of our UK Gas Transmission business (impacting our 2022/23 results).

### Statutory operating profit

£m	2023/24	2022/23	Change
UK Electricity Transmission	1,674	993	69%
UK Electricity Distribution	975	1,069	(9%)
UK Electricity System Operator	382	237	61%
New England	641	1,132	(43%)
New York	362	541	(33%)
National Grid Ventures	558	957	(42%)
Other activities	(117)	(50)	134%
<b>Continuing operations</b>	<b>4,475</b>	<b>4,879</b>	<b>(8%)</b>
Discontinued	—	715	(100%)
<b>Total</b>	<b>4,475</b>	<b>5,594</b>	<b>(20%)</b>

The notation 'n/m' is used throughout this section where the year-on-year percentage change is deemed to be 'not meaningful'.

### Adjusted operating profit

£m	2023/24	2022/23	Change
UK Electricity Transmission	1,677	995	69%
UK Electricity Distribution	993	1,091	(9%)
UK Electricity System Operator	880	238	270%
New England	643	708	(9%)
New York	860	741	16%
National Grid Ventures	469	490	(4%)
Other activities	(60)	31	(294%)
<b>Continuing operations</b>	<b>5,462</b>	<b>4,294</b>	<b>27%</b>
Discontinued	—	714	(100%)
<b>Total</b>	<b>5,462</b>	<b>5,008</b>	<b>9%</b>

### Underlying operating profit (a non-GAAP measure)

£m	2023/24	2022/23	Change
UK Electricity Transmission	1,314	1,107	19%
UK Electricity Distribution	1,152	1,230	(6%)
UK Electricity System Operator	80	31	158%
New England	802	819	(2%)
New York	1,016	874	16%
National Grid Ventures	469	490	(4%)
Other activities	(60)	31	(294%)
<b>Continuing operations</b>	<b>4,773</b>	<b>4,582</b>	<b>4%</b>

Statutory operating profit decreased in the year, primarily as a result of exceptional net charges of £1,011 million in 2023/24 (compared with exceptional net gains of £935 million in 2022/23). This was partly offset by £945 million favourable year-on-year movements in timing net over-recoveries, £374 million favourable year-on-year movements in commodity derivative remeasurements, improved underlying performance in UK Electricity Transmission, New York, and New England (once the impact of Rhode Island disposal in 2022/23 is considered), a UK Electricity System Operator accounting benefit (no depreciation following classification as held for sale), but lower property sales in 'Other activities' than 2022/23.

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	2023/24	2022/23	Change
Revenue	2,735	1,987	38%
Operating costs	(1,061)	(994)	7%
<b>Statutory operating profit</b>	<b>1,674</b>	993	69%
Exceptional items	3	2	50%
<b>Adjusted operating profit</b>	<b>1,677</b>	995	69%
Timing	(363)	112	n/m
<b>Underlying operating profit</b>	<b>1,314</b>	1,107	19%
<b>Analysed as follows:</b>			
Net revenue	2,510	1,770	42%
Regulated controllable costs	(248)	(241)	3%
Post-retirement benefits	(38)	(31)	23%
Other operating costs	(26)	(19)	37%
Depreciation and amortisation	(521)	(484)	8%
<b>Adjusted operating profit</b>	<b>1,677</b>	995	69%
Timing	(363)	112	n/m
<b>Underlying operating profit</b>	<b>1,314</b>	1,107	19%

UK Electricity Transmission statutory operating profit was £681 million higher in the year. In 2023/24, there were £2 million of exceptional costs related to our cost-efficiency programme (2023: £2 million) and integration costs of £1 million (2023: £nil). Timing over-recoveries of £363 million in 2023/24 compared with £112 million under-recoveries in 2022/23. This is mainly due to a favourable net impact of capital allowances, lower under-collections of Transmission Network Use of System (TNUoS) revenues driven by lower volumes and the impact of higher inflation in the prior year, an over-recovery of pass-through costs and higher recovery of prior period balances compared with 2022/23.

Adjusted operating profit increased by £682 million (69%), but this was primarily driven by £475 million of favourable year-on-year timing movements. Underlying operating profit increased by 19%. Underlying net revenues were £265 million (14%) higher principally from the impact of last year's revenue reduction related to the return of £147 million for Western Link liquidated damages (received in earlier years), alongside higher revenues from continued investment growth and RAV indexation.

Regulated controllable costs were £7 million (3%) higher from the impact of inflationary and workload increases mostly offset by efficiency savings. Other costs were higher, mainly relating to profit from sale of assets in the prior year and an increase in higher network innovation allowance costs.

The higher depreciation and amortisation principally reflects a higher asset base as a result of continued investment.

## UK Electricity Distribution

£m	2023/24	2022/23	Change
Revenue	1,795	2,045	(12%)
Operating costs	(820)	(976)	(16%)
<b>Statutory operating profit</b>	<b>975</b>	1,069	(9%)
Exceptional items	18	22	(18%)
<b>Adjusted operating profit</b>	<b>993</b>	1,091	(9%)
Timing	159	139	n/m
<b>Underlying operating profit</b>	<b>1,152</b>	1,230	(6%)
<b>Analysed as follows:</b>			
Net revenue	1,562	1,627	(4%)
Regulated controllable costs	(270)	(235)	15%
Post-retirement benefits	(20)	(24)	(17%)
Other operating costs	(56)	(54)	4%
Depreciation and amortisation	(223)	(223)	—%
<b>Adjusted operating profit</b>	<b>993</b>	1,091	(9%)
Timing	159	139	n/m
<b>Underlying operating profit</b>	<b>1,152</b>	1,230	(6%)

UK Electricity Distribution statutory operating profit was £94 million lower in the year, reflecting lower incentives under RII0 ED-2 price control that commenced this financial year, mainly driven by changes in the incentive regime compared with RII0 ED-1.

In 2023/24, there were £18 million of exceptional costs related to the integration of the business into the wider Group (2023: £22 million). Adjusted operating profit reduced by 9% including the impact of £20 million adverse year-on-year timing movements. Timing under-recoveries of £159 million in 2023/24 are mainly due to an under-recovery for inflation true-ups and the return of prior period balances.

Underlying operating profit reduced by £78 million (6%). Underlying net revenues were £45 million lower than the prior year due to lower incentives under RII0 ED-2, lower engineering recharge revenue and lower Smart Metering sales, partly offset by the impact of higher inflation.

Regulated controllable costs were £35 million (15%) higher than the prior year from the impact of inflationary and workload increases, partly offset by efficiencies achieved.

Depreciation and amortisation remains in line with the prior year with the impact of increasing asset base offset by other fair value movements.

## UK Electricity System Operator

£m	2023/24	2022/23	Change
Revenue	3,788	4,690	(19%)
Operating costs	(3,406)	(4,453)	(24%)
<b>Statutory operating profit</b>	<b>382</b>	237	61%
Exceptional items	498	1	n/m
<b>Adjusted operating profit</b>	<b>880</b>	238	270%
Timing	(800)	(207)	n/m
<b>Underlying operating profit</b>	<b>80</b>	31	158%
<b>Analysed as follows:</b>			
Net revenue	1,183	538	120%
Controllable costs	(212)	(175)	21%
Post-retirement benefits	(21)	(17)	24%
Other operating costs	(9)	(7)	29%
Depreciation and amortisation	(61)	(101)	(40%)
<b>Adjusted operating profit</b>	<b>880</b>	238	270%
Timing	(800)	(207)	n/m
<b>Underlying operating profit</b>	<b>80</b>	31	158%

This business is expected to be purchased by HM Government during 2024/25. At the end of October 2023, legislation required to enable the separation of the UK Electricity System Operator (ESO) was passed through Parliament. Since October 2023, it has been reclassified as 'held for sale' with no further depreciation or amortisation charges being made. Based on the scale and pass-through nature of the UK Electricity System Operator, this business is not considered to be a separate major line of business in the Group and therefore does not meet the definition of a discontinued operation under IFRS 5.

UK Electricity System Operator statutory operating profit increased by £145 million in the year as a result of £593 million favourable year-on-year timing over-recoveries, partly offset by a £498 million exceptional provision for the return (in future periods) of the estimated remaining balance of over-collected revenues at the date of disposal. Under IFRS a regulatory liability is not usually recognised on balance sheet for the return of such over-recoveries, however due to the intended disposal of this business during 2024/25, a liability has been recognised because these amounts are expected to be settled through the planned sale process in 2024/25.

During 2023/24, UK Electricity System Operator had a timing over-recovery of £800 million (2023: £207 million net over-recovery including the collection of under-recovered balances from prior years). The 2023/24 over-recovery is the result of higher revenues collected through the BSUoS fixed price tariffs compared with total system balancing costs incurred for the year. The over-recovered position is £877 million at 31 March 2024, which from an ESO perspective, will be returned to customers by adjusting tariffs in 2024/25 and in future periods as required. In 2022/23, £1 million of exceptional costs were incurred as part of our broader cost efficiency programme.

Adjusted operating profit increased by £642 million driven by the £593 million year-on-year timing movement and also the impact of no further depreciation following classification as 'held for sale'. Excluding the impact of timing, underlying operating profit increased by £49 million. Underlying net revenue was £52 million higher, but broadly offset by increased costs as a result of the expected higher volume of work under RII0-2 and additional Future System Operator costs ahead of separation of this business. Depreciation and amortisation was £40 million lower, representing depreciation being charged for only the first seven months of the year, up to 27 October 2023, the date the business was classified as 'held for sale'.

## New England

£m	2023/24	2022/23	Change
Revenue	3,948	4,427	(11)%
Operating costs	(3,307)	(3,295)	— %
<b>Statutory operating profit</b>	<b>641</b>	1,132	(43)%
Exceptional items	17	(456)	n/m
Remeasurements	(15)	32	n/m
<b>Adjusted operating profit</b>	<b>643</b>	708	(9)%
Timing	69	39	n/m
Major storm costs	90	72	25%
<b>Underlying operating profit</b>	<b>802</b>	819	(2)%
<b>Analysed as follows:</b>			
Net revenue	2,295	2,332	(2)%
Regulated controllable costs	(701)	(755)	(7)%
Post-retirement benefits	(7)	(27)	(74)%
Bad debt expense	(79)	(58)	36%
Other operating costs	(445)	(391)	14%
Depreciation and amortisation	(420)	(393)	7%
<b>Adjusted operating profit</b>	<b>643</b>	708	(9)%
Timing	69	39	n/m
Major storm costs	90	72	25%
<b>Underlying operating profit</b>	<b>802</b>	819	(2)%

New England's statutory operating profit decreased by £491 million, principally as a result of the non-recurrence of the £511 million exceptional net gain on disposal of NECO in 2022/23. Exceptional items also included £6 million of charges related to our cost efficiency programme (2023: £27 million), £11 million of transaction costs related to disposal of NECO (2023: £36 million) and an £8 million exceptional credit in 2022/23 related to the discount rate on environmental provisions. Major storm costs were £18 million higher than 2022/23, commodity remeasurements were £47 million favourable to the prior year and timing under-recoveries were £30 million higher year-on-year driven by returning commodity over-recoveries from 2022/23.

Excluding the above items, the impacts of partial year ownership of NECO in 2022/23 and unfavourable year-on-year foreign exchange movements are partially offset by improved underlying performance in the remaining New England businesses.

Adjusted operating profit decreased by £65 million (9%) at actual exchange rates. Adjusted operating profit includes the impact of major storm costs which were £18 million higher than the prior year (but as in 2022/23, these passed our \$100 million threshold in aggregate with New York, so are excluded from our underlying results) along with £30 million unfavourable year-on-year timing movements.

Underlying operating profit decreased by £17 million (2%, at actual FX rates). The impact of not owning our Rhode Island business for two months in 2023/24 reduced underlying operating profit by £52 million (6%) and movements in foreign exchange reduced 2023/24 underlying operating profit by £31 million (4%). Unless stated otherwise, the following commentary is presented excluding the impact of the disposal of NECO in May 2022 and also excluding the impact of foreign currency movements. Underlying net revenue was £7 million lower, but £81 million higher at constant currency and £176 million higher after excluding the impact of the disposal of NECO, driven by the benefits of rate case increments in Massachusetts Gas and Massachusetts Electric and higher wholesale network revenues. New England controllable costs decreased by £3 million as a result of efficiency savings partially offset by inflation and workload increases. Bad debt expense increased by £25 million as a result of higher accounts receivable in 2023/24, driven by increased net revenue (on a constant currency basis). Depreciation and amortisation increased as a result of higher investment. Other costs were higher due to increases in environmental reserves and capital-related operating and maintenance costs partially offset by the benefit of a gain on a pension buyout.



## New York

£m	2023/24	2022/23	Change
Revenue	6,094	6,994	(13%)
Operating costs	(5,732)	(6,453)	(11%)
<b>Statutory operating profit</b>	<b>362</b>	541	(33%)
Exceptional items	506	(118)	n/m
Remeasurements	(8)	318	n/m
<b>Adjusted operating profit</b>	<b>860</b>	741	16%
Timing	20	(53)	n/m
Major storm costs	136	186	(27%)
<b>Underlying operating profit</b>	<b>1,016</b>	874	16%
<b>Analysed as follows:</b>			
Net revenue	4,037	4,037	—%
Regulated controllable costs	(1,057)	(1,151)	(8%)
Post-retirement benefits	(21)	(2)	n/m
Bad debt expense	(96)	(157)	(39%)
Other operating costs	(1,345)	(1,366)	(2%)
Depreciation and amortisation	(658)	(620)	6%
<b>Adjusted operating profit</b>	<b>860</b>	741	16%
Timing	20	(53)	n/m
Major storm costs	136	186	(27%)
<b>Underlying operating profit</b>	<b>1,016</b>	874	16%

New York statutory operating profit decreased by £179 million, principally as a result of £624 million higher exceptional charges, partly offset by £326 million favourable year-on-year movements in commodity contract remeasurements. The exceptional items swing includes a £156 million gain in 2022/23 for increasing the discount rate on environmental provisions and a £496 million charge for the increase in environmental provisions to reflect updates on the scope and design of remediation activities related to certain of our sites. Other exceptional items (related to our cost efficiency programme) were £28 million lower than the prior year. Timing under-recoveries of £20 million in 2023/24 compared with timing over-recoveries of £53 million in 2022/23 primarily driven by lower auction sale prices on transmission wheeling, higher commodity under-recovery and under-recovery of Smart Path Connect incentives. Major storm costs of £136 million were £50 million lower year-on-year, driven by non-recurrence of Storm Elliott, but as in 2022/23, the total costs passed our threshold (\$100 million in aggregate with New England) and so are excluded from our underlying results. These factors, offset by increased underlying operating profit, driven primarily by rate increases and controllable cost efficiencies, reduced statutory operating profit to £362 million.

Adjusted operating profit increased by £119 million (16%), impacted by £73 million year-on-year unfavourable timing movements, offset by lower year-on-year major storm costs of £50 million and underlying operating profit increasing by £142 million (16%), including a £32 million decrease as a result of foreign exchange movements. Adjusted for the impact of foreign currency, underlying operating profit increased by £174 million (21%) compared with 2022/23.

Underlying net revenues increased by £73 million (£221 million increase at constant currency) from the benefits of rate case increases in KEDNY, KEDLI and NIMO alongside early recovery of expenditure on our Smart Path Connect programme. Regulated controllable costs were £51 million lower year-on-year, with increased workload and the impact of inflation being more than offset by cost efficiency savings and one-off items in 2022/23 not recurring. Provisions for bad and doubtful debts decreased by £55 million driven by non-recurrence of write-offs related to the COVID-19 arrears management programme recorded in 2022/23. Depreciation and amortisation increased due to the growth in assets. Other costs (on an underlying basis) were higher due to increased property taxes and higher costs on funded programmes (offset by rate increases), and higher pension buy out gain in 2022/23.

## National Grid Ventures

£m	2023/24	2022/23	Change
<b>Revenue</b>	<b>1,389</b>	1,341	4%
Operating costs	(665)	(235)	183%
Depreciation and amortisation	(166)	(149)	11%
<b>Statutory operating profit</b>	<b>558</b>	957	(42%)
Exceptional items	(89)	(467)	n/m
Remeasurements	—	—	n/a
<b>Adjusted/underlying operating profit</b>	<b>469</b>	490	(4%)

National Grid Ventures' statutory operating profit of £558 million in 2023/24 includes an exceptional gain of £89 million. Of this exceptional gain, £92 million relates to property damage insurance proceeds received following the fire at our French interconnector (IFA1) in September 2021, offset by £3 million of exceptional costs incurred as part of the broader cost efficiency programme. National Grid Ventures' statutory operating profit in 2022/23 included exceptional items related to a £335 million gain from the sale of a stake in Millennium Pipeline, a £130 million credit for property damage proceeds (again related to the IFA1 fire) and a £3 million credit for increasing the discount rate on environmental provisions, offset by £1 million of exceptional costs incurred as part of the broader cost efficiency programme.

Underlying and adjusted operating profit was £21 million lower than 2022/23. Overall interconnector profit decreased versus prior year reflecting non-recurrence of prior year business interruption insurance recoveries in IFA1 relating to the September 2021 fire, along with lower capacity prices. This is partially offset by improved availabilities in our North Sea Link interconnector (which benefited from an increase in the revenue cap following an Ofgem review) and improved performance in our Grain LNG business.

## Other activities

£m	2023/24	2022/23	Change
<b>Statutory operating (loss)/profit</b>	<b>(117)</b>	(50)	(134%)
Exceptional items	57	81	n/m
<b>Adjusted operating (loss)/profit</b>	<b>(60)</b>	31	(294%)
<b>Analysed as follows:</b>			
Property	30	216	(86%)
Corporate and Other activities	(90)	(185)	(51%)
<b>Adjusted operating (loss)/profit</b>	<b>(60)</b>	31	(294%)

Other activities statutory operating loss of £117 million (2023: £50 million loss) includes an exceptional charge of £46 million related to the cost efficiency programme (2023: £25 million), £5 million of costs for the separation of UK Gas Transmission (2023: £31 million) and £6 million of integration costs for UK Electricity Distribution (2023: £16 million).

Adjusted operating loss was £60 million (including corporate costs) in 2023/24 compared with £31 million profit in 2022/23. This decrease mainly relates to property site sales in the previous year, primarily related to the sale of 15 sites to St William. This is partially offset by lower corporate costs, which in the prior year included support payments to charitable causes and employees in respect of the energy crisis, and increased insurance income through insurance captives and claims.

## Exceptional items and remeasurements in operating profit – continuing

In 2023/24, we classified a number of items as exceptional, which has the net impact of decreasing our statutory operating profit by £1,011 million (2022: £935 million increase) compared with our adjusted and underlying operating profit measures. These items comprise of an exceptional charge of £496 million in 2023/24 related to increases in our environmental provisions (2023: £176 million credit); £498 million provision in UK Electricity System Operator for estimated timing over-recoveries expected to be transferred through the disposal process in 2024/25; transaction, separation and integration costs of £44 million (2023: £117 million); insurance recoveries of £92 million (2023: £130 million); and cost efficiency programme and operating model implementation costs of £65 million (2023: £100 million). In 2022/23 we also recognised exceptional gains on disposal of NECO, our Rhode Island business (£511 million), and Millennium Pipeline (£335 million). For further details see note 5 to the financial statements. Our 'Evolution' cost efficiency programme which commenced in 2021/22 has now been fully delivered, with £207 million of exceptional charges incurred in aggregate over this multi-year programme.

We also exclude certain unrealised gains and losses on mark-to-market financial instruments ('remeasurements') from adjusted and underlying profit. In 2023/24, net remeasurement gains on commodity contract derivatives (i.e. 'mark-to-market' movements on derivatives used to hedge the cost of buying wholesale gas and electricity on behalf of US customers) were £24 million, compared with net remeasurement losses of £350 million in 2022/23.

## Financing costs and taxation – continuing

### Net finance costs

Statutory net finance costs of £1,464 million were up from £1,460 million in 2022/23 and included derivative remeasurement gains of £15 million (2023: £54 million). Net finance costs (excluding derivative remeasurements) for the year were 2% lower than last year at £1,479 million, with the £35 million reduction driven by a lower accretion charge on our index linked debt, the impact of the bridge facility held last year to complete the strategic pivot which was repaid in 2022/23, offset by the impact of higher interest rates on refinancing completed in the current year (including higher interest costs in our US businesses). Other interest was adverse year-on-year reflecting higher discount unwind on provisions offset by higher pensions related interest. The effective interest rate for continuing operations of 4.2% is 20bps lower than the prior year rate.

### Joint ventures and associates

The Group's share of net profits from joint ventures and associates on a statutory basis decreased by £134 million. Of this decrease, £45 million relates to year-on-year derivative remeasurement losses in our NG Renewables joint venture. On an adjusted basis, the share of net profits from joint ventures and associates decreased by £89 million compared with 2022/23, mostly reflecting lower BritNed revenues driven by lower auction prices.

### Tax

The statutory tax charge for continuing operations was £831 million (2023: £876 million) including the impact of tax on exceptional items and remeasurements of £152 million credit (2023: £241 million charge). The adjusted tax charge for continuing operations was £983 million (2023: £635 million), resulting in an effective tax rate for continuing operations (excluding profits from joint ventures and associates) of 24.7% (2023: 22.8%).

Our underlying tax (a non-GAAP measure) takes our adjusted tax charge and further excludes the tax impacts on timing and major storm costs and deferred tax in our UK regulated businesses (NGET and NGED). The underlying tax charge for the year was £515 million (2023: £531 million). The underlying effective tax rate (excluding joint ventures and associates) of 15.6% was 170bps lower than last year (2023: 17.3%). This reflects a lower UK tax charge in 2023/24 primarily due to more capital expenditure qualifying for full expensing in 2023/24 than qualified for super-deductions in 2022/23, offset by the increase in the UK corporation tax rate. The Group's tax strategy is detailed later in this review.

## Discontinued operations

On 31 January 2023, we sold 60% of our interest in the National Gas Transmission in exchange for £2.2 billion cash consideration and we also received approximately £2.0 billion from additional debt financing. The £4.8 billion gain on disposal is excluded from the numbers in the table below. The 60% interest in National Gas Transmission was purchased by a consortium of long-term infrastructure investors which also held an option to acquire our remaining 40% interest. The consortium partially exercised this option on 11 March 2024 for total consideration of £681 million, reducing our retained minority interest to 20%. Further details are provided in the 'Assets held for sale and discontinued operations' note to the financial statements. The results of our 100% share of this business (including metering) are presented as discontinued operations for the 10 months fully owned to 31 January 2023. Both the 100% owned business and the retained minority equity investment have been classified as a business held for sale. The Group has not applied equity accounting in relation to the retained interest, resulting in no subsequent profits being recognised from the date of sale of our 60% interest onwards.

Statutory profit after tax of £78 million for discontinued operations (but excluding the gain on disposal) compared with £280 million in the prior year.

### UK Gas Transmission (including metering)

£m	2023/24	2022/23	Change
Revenue	—	1,604	(100%)
Operating costs	—	(889)	(100%)
<b>Statutory operating profit</b>	—	715	(100%)
Exceptional items	—	(1)	n/m
<b>Adjusted operating profit</b>	—	714	(100%)
Timing	—	(12)	n/m
<b>Adjusted operating profit (excluding timing)</b>	—	702	(100%)
<b>Analysed as follows:</b>			
Net revenue	—	946	(100%)
Regulated controllable costs	—	(146)	(100%)
Post-retirement benefits	—	(17)	(100%)
Other operating costs	—	(69)	(100%)
Depreciation and amortisation	—	—	— %
<b>Adjusted operating profit</b>	—	714	(100%)
Timing	—	(12)	n/m
<b>Adjusted operating profit (excluding timing)</b>	—	702	(100%)

The table in this section excludes the £4.8 billion gain on the disposal of our UK Gas Transmission business in 2022/23.

## Capital investment, asset growth and Value Added

### Capital investment

Capital investment comprises capital expenditure in critical energy infrastructure, equity investments, equity funding contributions to joint ventures and associates, and net movements in capital expenditure-related prepayments to secure delivery of future capital investment projects.

£m	At actual exchange rates			At constant currency		
	2023/24	2022/23 <sup>1</sup>	Change	2023/24	2022/23 <sup>1</sup>	Change
UK Electricity Transmission	1,912	1,301	47%	1,912	1,301	47%
UK Electricity Distribution	1,247	1,220	2%	1,247	1,220	2%
UK Electricity System Operator	85	108	(21%)	85	108	(21%)
New England	1,673	1,527	10%	1,673	1,470	14%
New York	2,654	2,454	8%	2,654	2,363	12%
National Grid Ventures	662	970	(32)%	662	955	(31)%
Other activities	2	13	(85)%	2	13	(85)%
<b>Continuing</b>	<b>8,235</b>	<b>7,593</b>	<b>8%</b>	<b>8,235</b>	<b>7,430</b>	<b>11%</b>
Discontinued	—	301	(100)%	—	301	(100)%
<b>Total Group</b>	<b>8,235</b>	<b>7,894</b>	<b>4%</b>	<b>8,235</b>	<b>7,731</b>	<b>7%</b>

1. Comparative amounts have been represented to reflect the reclassification of our US LNG operations from New England to NGV following an internal reorganisation in the year and the change in presentation for capital investments.

Capital investment in UK Electricity Transmission increased by £611 million compared with 2022/23 primarily due to increased expenditure in respect of ASTI projects (including capacity payments made to secure the supply chain) and additional spend in customer connections and asset operations. UK Electricity Distribution increased by £27 million primarily due to additional asset health funding in ED-2, including overhead line clearance, growth in connections partly offset by lower reinforcement capital expenditure. In New England, capital investment increased by £146 million (£203 million increase on a constant currency basis) primarily due to higher electric capital investment driven by transmission asset conditioning and higher gas investment driven by the Gas System Enhancement Plan (GSEP – our programme to accelerate the replacement of leak-prone pipe (LPP) across our gas business). In New York, capital investment was £200 million higher (£291 million higher at constant currency), primarily due to increased electricity network reinforcement (driven by the Smart Path Connect and CLCPA programmes) as well as higher gas capital investment driven by main replacement work including leak prone pipe and system integrity work. Capital investment in NGV decreased by £308 million (£293 million lower at constant currency) following the higher capital investment last year on largely completed projects during 2022/23.

In discontinued operations, UK Gas Transmission capital investment in the prior year of £301 million represented capital investment prior to disposal of the business in January 2023.

### Asset growth (a non-GAAP measure)

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 (RAV) 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.

In total, asset growth for the Group in 2023/24 was 9.7% (2023: 11.4%). Asset growth tracks the overall increase in assets (excluding foreign exchange movements and the impact of portfolio-repositioning transactions) using a combination of UK RAV and US rate base for our regulated businesses, and IFRS balances for our non-regulated businesses. Asset growth excludes the impact of the reduction in RAV, rate base and other assets as a result of the disposal of our NECO and UK Gas Transmission and Metering businesses during 2022/23. A detailed calculation of asset growth is provided on pages 255 to 256.

In terms of asset growth by business sector, UK RAV growth was 7.3% (2023: 11.5%) including the impact of lower CPIH inflation on RAV indexation, the change from RPI to CPIH indexation in RIIO ED-2, along with higher RAV depreciation. US rate base grew strongly by 11.5% (2023: 8.0%), with the higher level of capital expenditure under US GAAP resulting in increased rate base at 31 March 2024. Non-regulated businesses' growth was 14% (2023: 26%) mainly as a result of lower ongoing investment in National Grid Ventures.

### Value Added, Value Added per share and Value Growth (non-GAAP measures)

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. Value Growth, which is derived from Value Added (but using long-run inflation assumptions), forms part of our long-term management incentive arrangements. Detailed calculations of Value Added are provided on pages 252 to 253 and in 2022/23 exclude the reduction in assets and reduction in net debt as a consequence of the sale of NECO and the sale of 60% of the UK Gas Transmission and Metering business.

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 £2.9 billion in 2023/24. This was lower than last year's £4.8 billion, principally driven by lower RAV indexation in UK Electricity Transmission and UK Electricity Distribution, and lower National Grid Ventures and Other profits. Of the £2.9 billion Value Added, £1.7 billion was paid to shareholders as cash dividends and £1.2 billion was retained in the business. Value Added per share was 79.4p compared with 131.4p in 2022/23. Value Growth is normalised for long-run inflation assumptions by adjusting Value Added for the difference between actual experienced inflation on UK RAV indexation and index-linked debt and the equivalent movements at a long-run assumed inflation rate of 2% CPIH or 3% RPI, and dividing this result by the equity base used to calculate Group RoE (at closing exchange rates). Value Growth was 9.5% compared with 12.4% in 2022/23.

## 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 249. 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	2023/24	2022/23	Change
Cash generated from continuing operations	7,281	6,432	13%
Cash capital investment (net of disposals and exceptional insurance recoveries)	(7,588)	(7,167)	(6%)
Disposal of Millennium	—	497	(100%)
Dividends from JVs and associates	176	190	(7%)
<b>Business net cash (outflow)/inflow from continuing operations</b>	<b>(131)</b>	<b>(48)</b>	<b>n/m</b>
Net interest paid	(1,479)	(1,365)	(8%)
Net tax paid	(342)	(89)	n/m
Cash dividends paid	(1,718)	(1,607)	(7%)
Other cash movements	16	17	(6%)
<b>Net cash outflow (continuing)</b>	<b>(3,654)</b>	<b>(3,092)</b>	<b>(18%)</b>
Disposal of UK Gas Transmission and Metering and NECO <sup>1</sup>	681	6,995	(90%)
Discontinued operations	102	(9)	n/m
Repayment of bridge loan to acquire National Grid Electricity Distribution	—	(8,200)	100%
Other, including net financing raised in year	3,298	4,271	(23%)
<b>Increase/(decrease) in cash and cash equivalents</b>	<b>427</b>	<b>(35)</b>	<b>n/m</b>
<b>Reconciliation to movement in net debt</b>			
Increase/(decrease) in cash and cash equivalents	427	(35)	n/m
Repayment of bridge loan to acquire National Grid Electricity Distribution	—	8,200	(100%)
Less: other net cash flows from investing and financing transactions	(3,298)	(4,271)	23%
Net debt reclassified to held for sale	(23)	—	n/m
Impact of foreign exchange movements on opening net debt	466	(1,293)	n/m
Other non-cash movements	(206)	(765)	73%
(Increase)/decrease in net debt	(2,634)	1,836	n/m
Net debt at start of year	(40,973)	(42,809)	4%
<b>Net debt at end of year</b>	<b>(43,607)</b>	<b>(40,973)</b>	<b>(6%)</b>

1. Cash proceeds of £3,081 million for NECO and £4,032 million for UK Gas Transmission, less balance of cash and cash equivalents disposed with these businesses.

Cash flow generated from continuing operations was £7.3 billion, £849 million higher than last year, mainly due to timing over-recoveries (primarily in UK Electricity System Operator as a consequence of BSUoS revenues being higher than system balancing costs) and also higher revenues in UK Electricity Transmission and New York compared with 2022/23. These factors were partly offset by adverse year-on-year working capital movements (driven by higher payables at March 2023) and higher spend on provisions. Cash expended on investment activities increased as a result of continued growth in our regulated businesses (including prepayments of capital investment on ASTI offshore projects in UK Electricity Transmission). The £7.6 billion (2023: £7.2 billion) outflow is net of insurance recoveries related to the rebuild of the IFA1 interconnector in the UK. The disposal of our Millennium Pipeline investment in October 2022 also generated £497 million of proceeds in 2022/23.

Net interest paid increased as a result of a higher average level of net debt and increased interest rates on borrowings. The Group made net tax payments of £342 million (2023: £89 million) for continuing operations during 2023/24. This increase mainly related to higher taxable profits driven by over-recovered revenues in the UK Electricity System Operator. Prior year cash tax was also reduced by the offset of tax losses against gains on the sale of NECO and Millennium alongside refunds received in respect of US tax settlements for historical years.

The higher cash dividend of £1,718 million reflected a higher dividend per share due to the annual inflationary increase, partly offset by a higher scrip uptake of 18% (2023: 15%).

In 2022/23, we completed the sale of NECO for £3,081 million and the sale of 60% of the UK Gas Transmission and metering business for proceeds of £4,032 million. In 2023/24 we sold a further 20% interest in UK Gas Transmission for £681 million and received a dividend payment of £102 million in discontinued operations. Non-cash movements primarily reflect changes in the sterling-dollar exchange rate, accretions on index-linked debt, lease additions and other derivative fair value movements, offset by the amortisation of fair value adjustments on acquired debt.

During the year we raised £5.6 billion of new long-term senior debt to refinance maturing debt and to fund a portion of our significant capital programme. In 2022/23, the £8.2 billion bridge financing facility to fund the purchase of the UK Electricity Distribution business was fully repaid following receipt of proceeds from the sales of NECO and a 60% stake in our UK Gas Transmission and Metering business.

As at 22 May 2024, we have £7.9 billion of undrawn committed facilities available for general corporate purposes, all of which have expiry dates beyond May 2025. National Grid's balance sheet remains robust, with strong overall investment grade ratings from Moody's, Standard & Poor's (S&P) and Fitch.

The Board has considered the Group's ability to finance normal operations as well as funding a significant capital programme. This includes stress testing of the Group's finances under a 'reasonable worst-case' scenario, assessing the timing of the sale of businesses held for sale 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 2024	31 March 2023	Change
Goodwill and intangibles	13,160	13,451	(2%)
Property, plant and equipment	68,907	64,433	7%
Assets and liabilities held for sale	349	1,334	(74%)
Other net liabilities	106	(618)	(117%)
Tax balances	(7,728)	(7,374)	5%
Net pension assets	1,814	1,951	(7%)
Provisions	(3,109)	(2,642)	18%
Net debt	(43,607)	(40,973)	6%
<b>Net assets</b>	<b>29,892</b>	<b>29,562</b>	<b>1%</b>

Goodwill and intangibles reduced mainly as a result of changes in exchange rates during the year. Property, plant and equipment increased mainly as a result of the continuing capital investment programme offset by exchange rate movements. Assets held for sale at 31 March 2023 comprised the retained 40% minority interest in National Gas Transmission and at 31 March 2024 comprised the retained 20% minority interest in National Gas Transmission and the UK Electricity System Operator business. Tax balances increased principally from accelerated tax depreciation due to ongoing capital investment, movements in other net temporary differences and the impact of exchange rate movements. Net pension assets decreased as a result of lower asset valuations from negative investment returns in both the UK and the US, partly offset by a decrease in liabilities primarily from higher discount rates. Provisions were higher principally as a result of increases in US environmental charges and the impact of the discount unwind. Other movements are largely explained by net working capital inflows and changes in the sterling-dollar exchange rate.

Regulatory gearing (a non-GAAP measure), is calculated as net debt as a proportion of total regulatory asset value and other business invested capital, reduced significantly in the year to 69% as at 31 March 2024. This was lower than the previous year-end level of 71% with benefits from £0.9 billion of in-year timing over-recoveries and £0.7 billion of proceeds from the 20% sale of our retained interest in National Gas Transmission. Taking into account the benefit of our hybrid debt, adjusted gearing as at 31 March 2024 was 67%, with the current overall Group credit rating of BBB+/Baa1 (S&P/Moody's).

Retained cash flow as a proportion of adjusted net debt was 9.2%, down 10bps from 2022/23 and above the long-term average level of 7.0% indicated by Moody's, as consistent with maintaining our current Group rating.

#### Off-balance sheet items

There were no significant off-balance sheet items other than the commitments and contingencies detailed in note 30 to the financial statements. In accordance with IFRS, regulatory assets and regulatory liabilities are not recognised on the balance sheet. Further information in respect of certain of the Group's energy purchase contracts and commodity price risk is disclosed in note 32(f) to the financial statements.

#### Economic returns (non-GAAP measures)

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 RoE.

As explained on page 250, 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. Group RoE includes our UK Gas Transmission and Metering and NECO businesses up to the date these were sold.

Regulated RoEs are measures of how the businesses are performing compared with the assumptions and allowances set by our regulators. US jurisdictional and UK entity regulated returns are calculated using the capital structure assumed within their respective regulatory arrangements and, in the case of the UK, assuming inflation of 3% RPI under RIIO-1 and 2% CPIH under RIIO-2. 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 'RoE' (non-GAAP measures)

%	2023/24	2022/23	Change
UK Electricity Transmission	8.0%	7.5%	50bps
UK Electricity Distribution	8.5%	13.2%	-470bps
UK Gas Transmission	—%	7.8%	n/a
New England	9.2%	8.3%	90bps
New York	8.5%	8.6%	-10bps
Group RoE	8.9%	11.0%	-210bps

In 2023/24, UK Electricity Transmission achieved operational returns of 8.0%, 100bps higher than base allowed return under RIIO-2, mainly from totex performance related to savings on capital delivery (2022/23: 7.5% achieved return, or 120bps above the allowed base return). UK Electricity Distribution achieved an operational return of 8.5% in the first year of ED-2 in 2023/24, or 110bps outperformance, mostly as a result of totex performance driven by efficient capital expenditure (2022/23: 13.2% achieved return, or 360bps above the allowed base return with strong incentive performance in the final year of ED-1). For the 10 months owned in 2022/23, UK Gas Transmission achieved operational returns of 7.8% achieved return, or 120bps above the allowed base return.

New England's achieved return of 9.2% was 93% of the allowed return of 9.9% in 2023/24 as a result of higher rates offset by capital investments and controllable costs. The performance was improved compared to the 8.3% of the allowed return in 2022/23 with approximately 0.5% of the improvement driven by one-off items in the current year (mostly relating to a property tax regulatory settlement). New York's achieved return of 8.5% was 96% of the allowed return of 8.9% in 2023/24. This was a slight reduction compared with an achieved return of 8.6% in 2022/23. The quoted returns for New England and New York represent the weighted average return across operating companies within each jurisdiction.

Overall Group RoE, which incorporates NGV, property, corporate and other activities, and financing and tax performance was 8.9%.

## 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. For information on the Company's activities, please see page 3 and for a definition of discontinued operations, please see note 10 to the financial statements.

### 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 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. The Group's entities are tax resident in their jurisdiction of incorporation other than where indicated in the footnotes to note 34 to the financial statements.

2023/24	Revenue			Profit/(loss) before income tax <sup>3</sup> £m	Income tax accrued – current year <sup>4</sup> £m	Tangible assets/(liabilities) other than cash and cash equivalents <sup>5</sup> £m
	Unrelated party <sup>1</sup> £m	Related party <sup>2</sup> £m	Total £m			
United Kingdom	9,063	128	9,191	2,890	411	32,189
United States	10,787	68	10,855	181	82	36,718
Isle of Man	—	44	44	56	—	—
Luxembourg	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—
Guernsey	—	—	—	—	—	—
<b>Total</b>	19,850	240	20,090	3,127	493	68,907

2022/23	Revenue			Profit/(loss) before income tax <sup>3</sup> £m	Income tax accrued – current year <sup>4</sup> £m	Tangible assets/(liabilities) other than cash and cash equivalents <sup>5</sup> £m
	Unrelated party <sup>1</sup> £m	Related party <sup>2</sup> £m	Total £m			
United Kingdom	11,215	111	11,326	2,729	175	30,001
United States	12,048	58	12,106	1,269	225	34,432
Isle of Man	—	32	32	(35)	—	—
Luxembourg	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—
Guernsey	—	5	5	—	—	—
<b>Total</b>	23,263	206	23,469	3,963	400	64,433

1. Unrelated party revenue comprises revenue from continuing operations of £19,850 million (2023: £21,659 million) (see consolidated income statement) and revenue from discontinued operations of £nil (2023: £1,604 million) (see note 10 to the financial statements).
2. Related party revenue only includes cross-border transactions and comprises related party revenue from continuing operations of £240 million (2023: £206 million) and related party revenue from discontinued operations of £nil (2023: £nil).
3. Profit/(loss) before income tax (PBT) from operations after exceptionals comprises continuing operations PBT of £3,048 million (2023: £3,590 million) (see consolidated income statement) and discontinued operations PBT of £79 million (2023: £373 million) (see note 10 to the financial statements).
4. Current year income tax accrued comprises current year income tax from continuing operations of £492 million (2023: £386 million) (see note 7 to the financial statements) and current year income tax from discontinued operations of £1 million (2023: £14 million). See the tax charge to tax paid reconciliation below for further information.
5. Tangible assets comprises property, plant and equipment (see consolidated statement of financial position) and excludes tangible fixed assets for businesses classified as disposed of or 'held for sale' during the year. In the current year, PPE classified as 'held for sale' of £113 million (see note 10 to the financial statements) all relates to UK Electricity System Operator (ESO) (2023: UK Gas Transmission £4,981 million, NECO £3,363 million disposals). The ESO 'held for sale' PPE figure in note 10 differs by £2 million to note 13 due to an immaterial adjustment.

Our Hong Kong entity is UK tax resident and is in liquidation and our entities in Australia and Canada were dissolved during the year. Therefore, those jurisdictions have not been included in the table above.

Our Netherlands entity was dissolved in February 2023.

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. We note that our Guernsey captive insurance company was merged into our Isle of Man company during the year.

Our presence in Luxembourg is to address a nationalisation risk which arose from a Labour Party proposal in 2019 to nationalise nearly all of National Grid's UK assets.

Transfer pricing is not a significant issue for the Group given the nature of our core businesses and the number of jurisdictions we operate in. Where there are related party transactions, these are taxed on an arm's-length basis in accordance with the Organisation for Economic Co-operation and Development (OECD) principles.

## Financial review continued

### 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	2023/24	2022/23
<b>Total Group tax charge<sup>1</sup></b>	<b>832</b>	969
Adjustment for Group non-cash deferred tax	(465)	(579)
Adjustments for Group current tax (charge)/credit in respect of prior years	126	10
<b>Group current tax charge</b>	<b>493</b>	400
Group tax instalment payments (repayable)/payable in respect of the prior year	2	—
Utilisation of tax attributes <sup>2</sup>	(63)	(218)
Tax instalment payments over/(under) paid due in the following year	(22)	—
Tax recoverable offset against current tax payments due	(72)	(21)
Group tax payment/(refunds) in respect of prior years paid in the current year <sup>3</sup>	3	(70)
Group tax payments relating to tax disclosed elsewhere in the financial statements	1	1
<b>Group tax paid</b>	<b>342</b>	92
<b>Profit before income tax<sup>4</sup></b>	<b>3,127</b>	3,963
	%	%
Effective cash tax rate <sup>5</sup>	10.9	2.3
Effective tax rate <sup>6</sup>	26.6	24.5

- Total Group tax charge from operations after exceptionals is comprised of tax charge of continuing operations of £831 million (2023: £876 million) and discontinued operations of £1 million (2023: £93 million).
- Relates primarily to US utilisation of tax credits (2023: Relates to US utilisation of tax losses against, primarily, gains on the sale of NECO and Millennium).
- Prior year primarily relates to refunds in respect of US tax settlements for historical years.
- Profit/(loss) before income tax (PBT) after exceptionals is comprised of continuing operations PBT of £3,048 million (2023: £3,590 million) and discontinued operations PBT of £79 million (2023: £373 million).
- No payments were made in respect of the discontinued operations tax charge of £1 million.
- Effective tax rate for continuing operations after exceptionals is 27.3% (2023: 24.4%) and discontinued operations is 1.3% (2023: 24.9%).

### Effective cash tax rate

The effective cash tax rate for the total Group is 10.9%. The difference between this and the accounting effective rate of 26.6% is primarily 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 2023/24 the Group's total capital expenditure (see page 248) was £7,648 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 taxes payable, which consist of the Corporate Alternative Minimum Tax, is reduced by the utilisation of the available tax credits. The remaining Corporate Alternative Minimum Tax is due to be paid in the following period, hence no significant federal tax payments were made in the current period. However, payments of £8 million were made during the year for US state and local taxes based on the net assets of US subsidiaries.

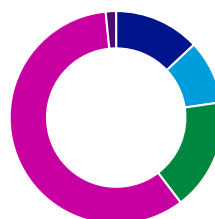
The Group continued to make payments into the UK defined benefit pension schemes, National Grid UK Pension Scheme, National Grid Electricity Group section of the Electricity Supply Pension Scheme and the Western Power Pension Scheme during the course of the year. These payments have further reduced the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

### 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 which includes contributions from both continuing and discontinued businesses.

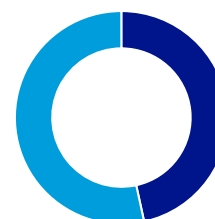
#### Group's total tax contribution 2023/24 (taxes borne/collected)

##### Taxes borne



Key:	£m
People	262
Product	195
Profit	342
Property	1,183
Miscellaneous	32
<b>Total</b>	<b>2,014</b>

##### Taxes collected



Key:	£m
People	844
Product	968
<b>Total</b>	<b>1,812</b>

Taxes borne are a cost to the Group. Taxes collected are taxes generated by the operations of the Group which we are obliged to administer on behalf of the government (e.g. income tax under PAYE, employees' national insurance contributions).

2023/24	Tax contribution					Number of employees <sup>2</sup> as at 31 March 2024
	Income tax paid/(repaid) on cash basis <sup>1</sup> £m	Property taxes £m	Other taxes borne <sup>2</sup> £m	Taxes collected £m	Total tax contribution £m	
United Kingdom	341	227	151	1,102	1,821	13,956
United States	1	956	338	710	2,005	17,469
Ireland	—	—	—	—	—	—
Isle of Man	—	—	—	—	—	—
Luxembourg	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—
<b>Total</b>	<b>342</b>	<b>1,183</b>	<b>489</b>	<b>1,812</b>	<b>3,826</b>	<b>31,425</b>

- See the tax charge to tax paid reconciliation above for further information.
- Other taxes borne is made up of People, Product and Miscellaneous taxes.
- Number of employees is calculated as the total National Grid workforce across all parts of the business, including Non-executive Directors and Executive Directors and employees of the discontinued operations. All are active, permanent employees as well as both full-time and part-time employees.

2022/23	Tax contribution					Number of employees <sup>2</sup> as at 31 March 2023
	Income tax paid/(repaid) on cash basis <sup>1</sup> £m	Property taxes £m	Other taxes borne <sup>2</sup> £m	Taxes collected £m	Total tax contribution £m	
United Kingdom	157	305	144	1,435	2,041	14,397
United States	(65)	997	354	733	2,019	16,878
Ireland	—	—	—	—	—	—
Isle of Man	—	—	—	—	—	—
Luxembourg	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—
<b>Total</b>	<b>92</b>	<b>1,302</b>	<b>498</b>	<b>2,168</b>	<b>4,060</b>	<b>31,275</b>

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

For 2023/24, our total tax contribution globally was £3,826 million (2022/23: £4,060 million), taxes borne were £2,014 million (2022/23: £1,892 million) and taxes collected were £1,812 million (2022/23: £2,168 million). Our total tax contribution has decreased in the year primarily due to a reduction in product taxes collected (principally UK VAT).

Two thirds of the tax borne by the Group continues to be in relation to property taxes, of which £956 million are paid in the US across over 1,200 cities and towns in Massachusetts, New Hampshire, New York 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. The impact in 2023/24 of the sale of our Rhode Island business is a reduction on property tax payments although this has been offset by increases in US property taxes on the continuing business.

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 result of the survey for 2022/23 ranks National Grid as the 13th highest contributor of UK taxes (2021/22: 14th), the 11th highest in respect of taxes borne (2021/22: 10th) and second in respect of capital expenditure of £3,057 million (2021/22: £3,858 million) on fixed assets (2021/22: first). 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 (see page 248), which in 2023/24 was £7,648 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 as well as 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 and the Solar Energy Industries Association.

Feedback from these groups, such as the results of the 100 Group Total Tax Contribution survey 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 2023/24, defined contribution pensions, defined benefit pensions and other post-employment benefit operating costs were broadly in line with prior year at £273 million (2022/23: £274 million).

During the year, our pensions and other post-retirement benefit plans decreased from a net surplus position of £1,951 million at 31 March 2023 to a net surplus of £1,814 million at 31 March 2024.

This was principally the result of actuarial losses on plan assets of £709 million (lower investment returns) and actuarial gains on plan liabilities of £491 million (higher discount rates from corporate bond yields and lower long-term RPI inflation expectations). Employer contributions during the year were £165 million (2023: £284 million), including £23 million (2023: £123 million) of deficit contributions. As at 31 March 2024, the total UK and US assets and liabilities and the overall net IAS 19 (revised) accounting surplus (2023: surplus) is shown below. Further information can be found in note 25 to the financial statements.

### Net pension and other post-retirement obligations

£m	UK	US	Total
Plan assets	11,782	7,951	19,733
Plan liabilities	(10,521)	(7,398)	(17,919)
Net surplus	1,261	553	1,814

As at 31 March 2024, we recognised in the statement of financial position pension assets of £19,733 million (UK pensions £11,782 million; US pensions £5,320 million; and US other £2,631 million); and pension liabilities of £17,919 million (UK pensions £10,521 million; US pensions £4,912 million; and US other £2,486 million).

## Dividend

The Board has recommended an increase in the final dividend to 39.12p per ordinary share (\$2.4939 per American Depository Share), which will be paid on 19 July 2024 to shareholders on the register of members as at 7 June 2024. If approved, this will bring the full-year dividend to 58.52p per ordinary share, an increase of 5.55% over the 55.44p per ordinary share in respect of the financial year ended 31 March 2023. This is in line with the increase in average UK CPIH inflation for the year ended 31 March 2024 as set out in our dividend policy. Going forward, and following the rebasing of the 2023/24 dividend per share (DPS) following the Rights Issue, the Board will aim to grow annual DPS in line with UK CPIH, thus maintaining the DPS in real terms. The Board will review this policy regularly, taking into account a range of factors including expected business performance and regulatory developments.

At 31 March 2024, National Grid plc had £12.5 billion of distributable reserves, which is sufficient to cover more than five years of forecast Group dividends. If approved, the final dividend will absorb approximately £1,455 million of shareholders' funds. The 2023/24 dividend is covered approximately 1.3x by underlying earnings.

The Directors consider the Group's capital structure 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.

A scrip dividend alternative will again be offered in respect of the 2023/24 final dividend.

## New accounting standards

We did not adopt any new accounting standards in 2023/24. 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

For further details, see note 36 to the financial statements.