Task Force on Climate-related Financial Disclosures (TCFD)

Understanding the potential impacts of climate change

At National Grid, we recognise that addressing climate change is the defining challenge of the 21st century and the energy transition is accelerating at pace. Our networks and operations are crucial to transforming 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 2ºC above pre-industrial levels, and to pursue efforts to limit the increase to 1.5ºC.

We have supported the recommendations of the TCFD since its initial publication. The framework helps us understand the impact of climate change on our operations and has benefited us directly by: shaping our governance structure to effectively oversee risks and opportunities; aligning our business strategy to identify and seize transitional opportunities, including our significant step up in asset growth; 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.

We fully comply with FCA Listing Rule 6.6.6(8)R and align our climate-related financial disclosures with the TCFD's four pillars - governance, strategy, risk management, and metrics and targets, with 11 recommended disclosures under these pillars. Additionally, we meet the climate-related financial disclosure requirements outlined in sections 414CA and 414CB of the Companies Act 2006.

We published our second CTP in May 2024, which sets out the strategic action plans and mechanisms to realise our net zero commitments.

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

01 Governance

The Board sets and leads the Group's climate-related strategy and goals and has oversight of the climate-related risks and opportunities.

National Grid has five strategic priorities, as set out on pages 14-15, 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 Group'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. Its members have the requisite expertise in climate change and sustainability to effectively support the Group's strategy. This determination is based on an evaluation of their background and experience, particularly in the energy sector, executive roles, and expertise in sustainability and climate change, including related risks and opportunities. Specifically, several Board members, including Martha Wyrsch and Earl Shipp, have relevant experience in these areas. Martha brings extensive knowledge and experience around climate-related issues through her previous experience as CEO of a major international gas transmission business and in leading the growth and development of the renewable energy business of Vestas 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 U.S. Federal Reserves Energy Advisory Committee, brings to the Board knowledge of environmental, sustainability and climate-related issues. Other Board members including Jonathan Silver and Anne Robinson bring additional climate-related experience from previous roles. See pages 99-102 for information on the individual experience of Board members and page 111 for the specific skills attributed to the Board, including sustainability and climate change.

The Board received four 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 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 performance versus targets.

The Safety & Sustainability Committee met four times during the financial year where it discussed 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 Group's climate-related strategy.

In 2023/24 the Safety & Sustainability Committee took into consideration the adoption of 1.5°C aligned near-term science-based targets and the 2040 net zero target date recommended by the SBTi, considering the potential effect of the targets on near and long-term strategy and all stakeholders. After taking into consideration the lack of a SBTi gas sector specific pathway and the requirement for companies classed as electric utilities to be net zero by 2040, it was agreed that the Group was unable to align to the SBTi long-term net zero standard. The Committee agreed the updated near-term science-based targets and a longer-term target to reach net zero by 2050, these targets were reflected in the Group's second CTP which was recommended to the Board and approved by 99% of shareholders at the July 2024 AGM.

In July 2024, a workforce engagement session with members of the sustainability team took place where they discussed the Group's climate transition plan and external reporting approach.

In September 2024, the Safety & Sustainability Committee and the Audit & Risk Committee held a joint session to review progress on the Group's sustainability reporting and disclosure strategy, including plans for future reasonable assurance of Scope 1 and 2 GHG emissions reporting. To support this, the Board approved the appointment of Deloitte for external ESG assurance, adopting a single firm approach for both ESG assurance and financial audits. Future joint sessions will be held where it is beneficial to align and facilitate collaboration between the two committees.

The Board considered climate-related themes across several sessions at its strategy focused offsite in February 2025, including considering the Group scenarios which looked at the Groups's pathway to achieving its strategic priorities and consideration of the pathway to net zero and associated 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 matters (see page 111).

In February 2025, the Audit & Risk Committee, in carrying out its risk oversight duties, undertook a risk deep dive session on climate change mitigation to understand its impact on the Group's strategy.

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 96-121. Terms of Reference for the Board and its Committees are available on our website nationalgrid.com/about-us/corporate-information/corporate-governance.

For more details visit our
Climate Transition plan

Board level

Safety & Sustainability Committee (four scheduled meetings in 2024/25)

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.

Audit & Risk Committee (five scheduled meetings in 2024/25)

Oversight of our Responsible Business performance reporting, TCFD disclosures and reporting in line with leading ESG frameworks and the progress of our ESG control and assurance framework.

Remuneration Committee (four scheduled meetings in 2024/25)

Considers and approves whether and how ESG targets, including reductions in the Group's direct Scope 1 emissions and the enablement of a net zero transition (Scope 2 and 3 emissions and strategic initiatives) are incorporated into our incentive arrangements.

People & Governance Committee (three scheduled meetings in 2024/25)

Is updated on the leadership skills and capabilities needed in the business to deliver our net zero ambitions and set the strategy for attraction and retention.

Finance Committee (three scheduled meetings in 2024/25)

Considers the financial impact of climate factors on our credit metrics and relevant considerations with regards to debt and equity investors, pension and insurance strategy.

Informing **Reporting**

Executive level

Safety, Health & Sustainability Committee

Reviews and manages Group-wide environment tracking/monitoring and the related decisions.

Reputation & Stakeholder Management Executive Committee

Assesses the broader external context and provides strategic oversight for external engagement, including climate.

Ethics, Risk & Compliance Committee

Oversees the implementation of the Group's risk management and compliance framework and assessment of climate-related principal risks.

Policy & Regulation Committee

Agrees and provides strategic oversight of the Group's climate-related public policy priorities and positions.

Investment Committee

Has delegated authority to improve investment decisions, including and not limited to those related to ASTI and NY upstate upgrades and acquisition and divestment decisions.

Informing **Reporting**

Management level

Sustainability Steering Group

Provides oversight of the integration of Responsible Business into National Grid.

ESG Steering Group

Provides strategic oversight and alignment on ESG activities, including climate.

Sustainability Implementation Group

Ensures that our RBC commitments and principles are executed and implemented consistently across the Group.

Business unit Green Financing Committees

Provides governance of green financing.

Finance ESG and Group Sustainability teams

These teams develop the Group's sustainability reporting strategy, ensuring credible and reliable data, including TCFD disclosures.

Informing **Reporting**

Business unit level

Supports the implementation of the Group's Responsible Business Charter, our CTP and climate change risks and opportunities.

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 are 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 and Strategy team sets the Group's sustainability strategy, modelling potential climate scenarios and developing glidepaths that align to GHG emission reduction targets. In addition, they refreshed and published the Group's second CTP in 2024 which incorporates the Group's 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.

Additionally, the team leads the Supply Chain Climate Strategy Steering Group, which brings together SMEs across the business units, Procurement and Finance to provide oversight and progress against our sustainable supply chain objectives, including reporting improvements, decarbonisation levers and supplier engagement.

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 (CoE), Investor Relations and Group Treasury teams. The ESG CoE team are responsible for setting the Group sustainability voluntary and mandatory reporting strategy and ensuring credible and reliable internal and external reporting of sustainability data, tracking the Group's GHG metrics against our targets, developing controls for Scope 1 and 2 GHG emissions, managing external assurance and coordinating ESG rating agency submissions.

The Investor Relations and Treasury teams are responsible for 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 June, we successfully completed the £7 billion equity raise, one of the largest ever Rights Issues by a UK listed company, underpinning our commitment to deliver our five-year, c.£60 billion investment plan at pace.

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 34-41. Through our Enterprise Performance Management (EPM) framework, we complete monthly business review processes where 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

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 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 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 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. This year the Group issued a ~€1.5 billion green bond and has published a revised Green Financing Framework to incorporate the latest best practice and standards.

Engaging on policy interventions

Advocating for policy changes to enable the energy transition 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 secure, affordable and clean 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. A key part of making this a fair transition is the role we play in facilitating the wider decarbonisation of the economy. We believe the role of energy networks is vital to enable the transition to a clean energy future. For more details see our Principles for a Fair Transition document on our website.

See **page 57** for more details on international engagement, responsible political lobbying and trade associations

02 Strategy

Our efforts to understand climate-related risks and opportunities inform our strategic decisions, including our announcement last year to refocus on energy networks and drive unprecedented levels of investment.

We are well positioned to take advantage of the significant growth opportunities from the transition to net zero, by enabling the transportation and distribution of clean energy to homes and businesses in the regions where we operate. This requires a fundamental upgrade of our electricity and gas networks at a pace and scale not seen for several decades. We are delivering these upgrades today across all our jurisdictions.

We are also well prepared to mitigate the physical and transition risks associated with climate change. We use scenario planning to explore distinct possible futures, illuminating the opportunities and risks for us in each. This allows us to test the robustness of our business strategy to a range of potential outcomes and prepare for likely impacts on our business.

In this section, we summarise how we are capitalising on the main climate-related opportunity facing our business: the growth in electricity networks required to support the transition to net zero. We then outline how we use scenario modelling to assess climate-related risks and opportunities, providing a summary of our core scenarios. In the following section, we take a more detailed look at our risks and opportunities.

Investing to enable the transition to net zero

We continue to focus our business on electricity, with nearly 80% of Group assets expected to be electric by 2029. In September 2024, we completed the sale of the remaining 20% equity interest in UK Gas Transmission and Metering business, and in October 2024 we completed the sale of the UK Electricity System Operator to the Government.

In May 2024 we announced our intention to sell Grain LNG, our UK LNG asset, and in February 2025 we announced the sale of National Grid Renewables, our US onshore renewables business, to streamline our focus on networks. The National Grid Renewables sale is expected to finalise in the first half of the financial year ending 31 March 2026, subject to required consents and regulatory approvals.

Our five-year financial framework, forecasts c.£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 aligned with the principles of the EU Taxonomy for climate change adaptation and mitigation. Our investment across the Group is expecting to grow our asset base by around 10% per year through to 2028/29, focused in our regulated businesses.

In the UK we are leading the largest overhaul of the electricity grid in a generation. We submitted our Electricity Transmission business plan for the RIIO-T3 period from 2026 to 2031 in December 2024. This includes up to £35 billion of investment in expanding network capacity, connecting customers, and ensuring the health and resilience of the network. Our plan is also designed to adapt to an accelerated pathway in line with the Government's Clean Power 2030 ambition. We are clear that success will be dependent on Government and Ofgem taking bold action on community acceptance and planning consent, reform of customer connections and development of supply chain skills.

Our UK ED business is investing £6.7 billion during the ED2 period from 2023 to 2028 to ensure the readiness of the electricity network to unlock the potential for them to decarbonise further and faster. This includes asset replacement, network reinforcement, new connections, facilitating infrastructure for heat pumps, electric vehicles and generation.

In the US, well-developed energy transition 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 Electric Sector Modernization Plan, outlining the critical investments needed in the electricity distribution system over the next five years of $2 billion. The proposed investments in the Future Grid Plan align with feedback from customers and communities as part of an extensive engagement process in advance of this submission.

As part of our five-year capital investment framework to 2028/29 we expect to invest around £17 billion and £11 billion in our New York and New England regulated businesses respectively. In New York, we are making significant progress on the $4 billion upstate upgrade programme, which includes modernising the grid to meet the increasing demand for more reliable and renewable energy sources. 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, while helping to ensure energy security and sustainable affordability in the regions we operate in.

Our NGV business has planned capital investment of around £1 billion out to 2028/29, including the necessary maintenance investment across our operational interconnectors. In December 2023, our newest interconnector, Viking Link, became operational. This addition brings our total portfolio of six interconnectors to 7.8 GW of capacity, representing approximately 80% of the UK interconnector market.

In seeking to achieve our net zero target and support decarbonisation, we will leverage our strong financial position and investment-grade credit ratings to finance key investments for net zero energy distribution. Following the successful £7 billion Rights Issue in 2024/25, our balance sheet, backed by valuable assets and strong credit ratings, is flexible and well positioned for growth. We secure funding through borrowing and shareholder investments, adhering to regulatory rules, and closely monitor the financial health of our UK and US operations to maintain appropriate gearing ratios.

As we embark on a new growth phase, we have refined our strategy to focus on networks that will enable economic growth and the transition to net zero. Our updated strategic priorities support our CTP. Within our CTP we have identified necessary policy and regulatory support for future investments aimed at decarbonising the energy sector and reducing our emissions. Achieving our emissions reduction goals will be challenging without backing from policymakers and regulators. For our performance details against the CTP (refer to pages 44-47).

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

Scenario modelling

We use transition and physical scenario modelling to test how robust our Group strategy is to a range of possible futures out to 2050. We also look at the implications of our Group scenarios for our approach to sustainability and our climate target commitments. In relation to our climate targets, our CTP aligns to a 1.5°C scenario.

Transition scenario modelling

Our transition scenarios are tailored to the business environments in the UK and the US. They encompass a range of energy transition outcomes to 2050. Our 'Delayed' scenario represents a world with higher warming levels, where governments, industry and consumers do not pursue the transition at pace. Our 'Balanced Pathway' scenario sees approximately 2°C of warming, with the energy transition progressing at pace but supply chain, policy and cost challenges preventing our jurisdictions from hitting targets.

Our 'Electric Net Zero' scenario sees governments and industry prioritise achieving decarbonisation goals through supportive policies and regulatory reforms, achieving net zero by 2050. The main change from last year is the inclusion of the 'Balanced Pathway 2°C' instead of a second 1.5°C pathway. The 2024 UNEP Emissions Gap Report, which concludes that current Nationally Determined Contributions will lead to a 2.6-2.8°C rise this century, underscores our belief that a 2°C pathway is becoming more likely.

We continually monitor changes in the external environment and update the scenarios as part of our normal risk management process.

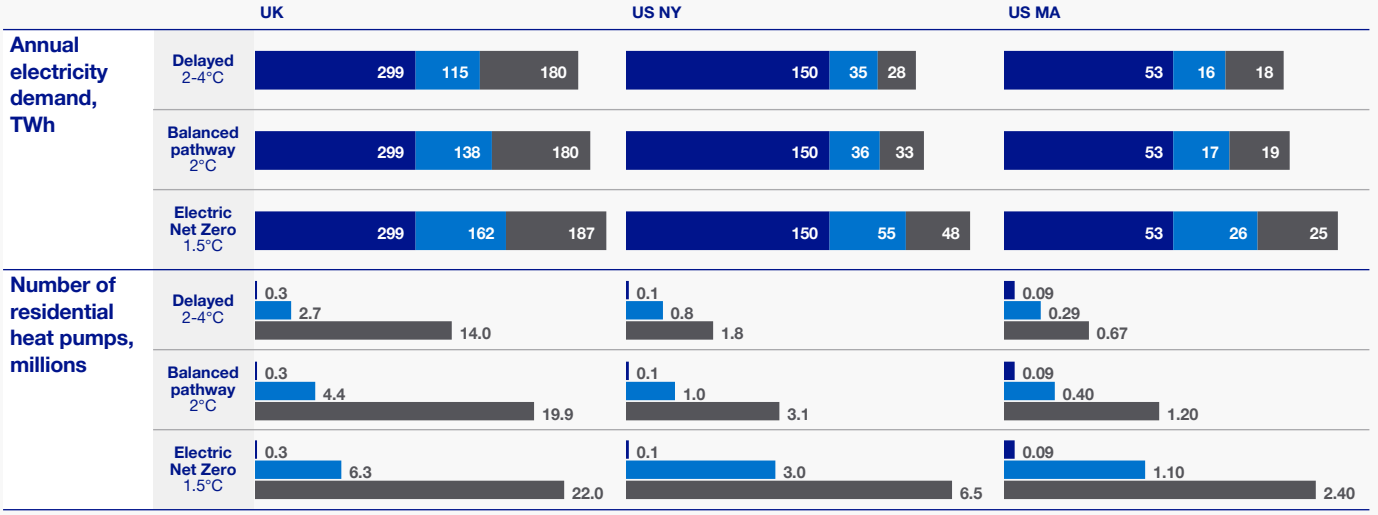
There are limitations to the scope of our modelling, for example, available data across other sectors. We use a wide range of resources and compare our results with external scenarios to mitigate this. While our scenarios are not intended to be predictions of likely future events, they inform our understanding of possible risks and opportunities arising from 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 70 – 74.

Transition scenario descriptions, assumptions and inputs (Climate change by 2100 vs. pre-industrial levels (approximate))

	Delayed 2-4°C	Balanced Pathway 2°C	Electric Net Zero 1.5°C
Description	• Represents a world where governments, industry and consumers do not pursue the transition at pace, meaning our jurisdictions miss climate targets.	• Energy transition drives forward at pace, but ongoing supply chain challenges, policy implementation delays, and short-term financial concerns mean our jurisdictions narrowly miss targets.	• Governments prioritise the achievement of decarbonisation goals through supportive policies and regulatory reforms, new load is met through clean power sources.
UK assumptions	• Decarbonisation progresses but is insufficient to meet net zero in 2050. • Resource nationalism disrupts established trade flows. • Supply chain disruptions and higher material prices. • Policy delays. • Wind and solar deployment continue very slowly with difficult supply chains and limited Government support. • Gas heating dominates, with low uptake of heat pumps as policies have limited impact. • Electric vehicle (EV) uptake stagnates due to cost. • Load growth is met by thermal generation staying online longer. • Reduced opportunities for further interconnection growth beyond what is in the pipeline.	• Decarbonisation progresses but just falls short of 2030 and 2035 targets. • Total energy consumption reduces 25% by 2050. • Electricity demand doubles by 2050, mainly because of electrification of heat and transport, green hydrogen production and data centre expansion. • Wind capacity targets missed by five years. • Heat pump growth restricted to new build houses. Current houses converting off gas heating continues at current rates. • EVs continues to grow at the current rate with the Zero Emissions Vehicles mandate in place. • Gas for power sector still has a role to play in the 2030s beyond the maximum 5% of power generation targeted in CP2030. • Interconnector projects progress at pace.	• Achieves net zero power system by 2035 and economy-wide net zero by 2050. • Energy consumption reduces >30% by 2050, as more efficient electric technology replaces combustion technology. • Electricity demand increases 2.2x fold by 2050. • 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. • Heat pumps mandated in existing homes as well as sufficient subsidy to support wide-spread adoption. • Widespread EV adoption as policies achieve targets. • Increased collaboration and coordination results in faster adoption of offshore hybrid assets and overall increased interconnectors.
US assumptions	• Achieves ~60% reduction in energy sector emission from 1990 levels. • State subsidies are scaled back, resulting in low uptake of heat pumps. • EV adoption stagnates in the near term driven by fewer federal incentives, although picks up based on cost in the 2030s. • No offshore wind added beyond what is fully permitted and currently under construction. • Some large onshore renewables are added each decade as states continue to pursue renewable targets but a delayed pace.	• Achieves ~70% reduction in energy emission sector vs 95% reduction target by 2050. • Heat pump adoption increases steadily as costs fall, capturing 50% of heat demand by 2050. • Slow adoption of EVs through the 2030s after Federal incentives end in 2025, with full competitiveness and growth upswing by 2035. • No new fossil units or major enhancements to existing plant. • Offshore wind stalls through 2035, then existing lease areas are gradually built out driven by energy needs, given no politically viable alternatives. • Onshore renewables deployment increases steadily but roughly 10 years behind stated policy goals.	• Core energy sectors including road transport, buildings and electricity achieve ~96% reduction in line with state targets. • Nearly complete electrification of heat demand. • Widespread EV adoption in line with policy targets. • Offshore wind picks up in the 2030s becoming the leading source of electricity generation in the region. • Onshore renewables deployment continues to meet the net zero goals.

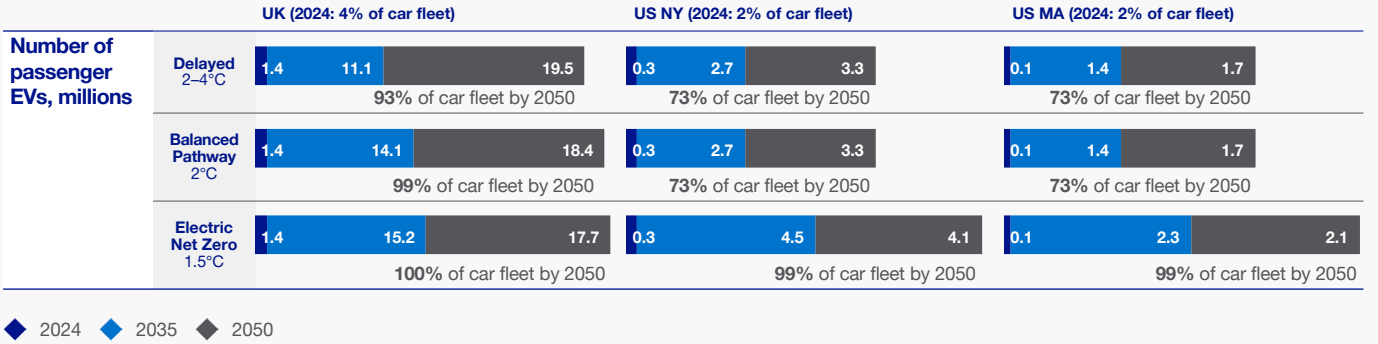
Transition scenario outputs

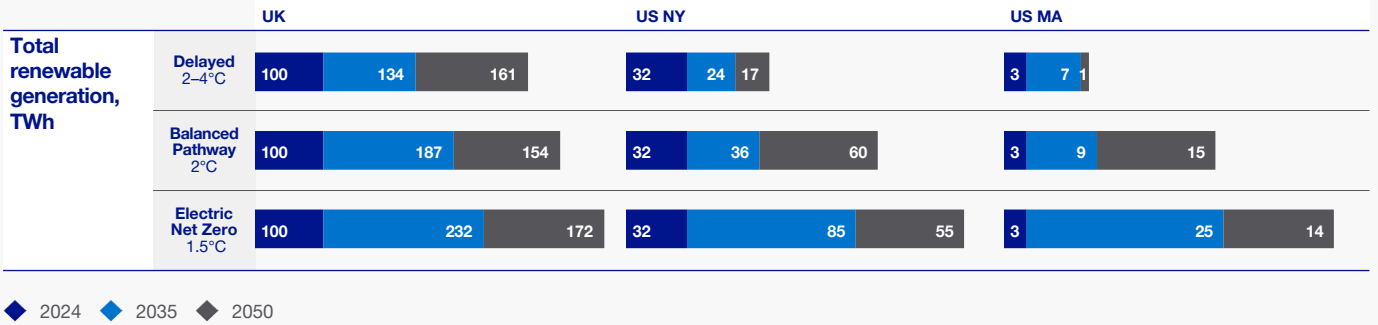


Note: NY refers to New York State, MA to Massachusetts. 2023 numbers added for heat pumps in NY as 2024 data is not yet available.

		US NY			US MA		
		2024	2035	2050	2024	2035	2050
Annual natural gas demand, MMBTU	Delayed 2–4°C	826m	842m (+1.9%)	761m (-7.9%)	270m	284m (+5.2%)	288m (+6.7%)
	Balanced Pathway 2°C	826m	820m (-0.7%)	504m (-39.0%)	270m	276m (+2.2%)	176m (-38.8%)
	Electric Net Zero 1.5°C	826m	477m (-42.3%)	44m (-94.7%)	270m	157m (-41.9%)	23m (-91.5%)

Note: Using 2023 data to estimate 2024 natural gas demand in New York and Massachusetts, as 2024 data is not yet available. Percentages shown depict the percentage change in demand vs 2024.





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

Changes since last year

This year, we have replaced our 'Hybrid Net Zero' scenario (a 1.5°C and net zero by 2050-aligned pathway, alongside Electric Net Zero), with our 'Balanced Pathway', where the energy transition progresses but falls short of government targets and net zero by 2050.

We now see a 1.5°C trajectory as less likely than in previous years. Our updated set of scenarios present a wider range of energy transition outcomes. They reflect governments in the areas we serve seeing economic growth and affordability as key priorities. In some cases they must manage tensions or trade-offs with the short-term costs of the transition.

We have retained our 'Delayed' and 'Electric Net Zero' Scenarios, updating them with new inputs to reflect the latest market, technology and policy trends and settings.

Transition scenario 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. 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 largely consistent with our headline insights from the previous year:

1. Achieving energy transition targets depends on effective reforms to drive clean power deployment and policies that incentivise consumer uptake of low carbon technologies
Policy settings and interventions will be a key enabler of the transition. Our ability to meet our own net zero commitments relies on these. Without adequate policy supports, for example sufficient Contract for Difference (CfD) budgets for renewables or consumer incentives for heat pump uptake, there is a risk our jurisdictions will fall short of policy targets. Successful implementation of key enabling policies like connections and planning reforms in the UK, and permitting reform in the US, will be a necessary precondition for our jurisdictions to accelerate in line with targets.

2. Electricity use and share of final demand will increase driven by consumer electrification and large load growth (e.g. data centres)
In the UK, we expect electricity demand to increase almost 50% by 2035 and more than double by 2050. In our states in the US, we expect an increase of around 25% by 2035 and approximately 50% by 2050. The demand increase arises from the electrification of heat, transport, and large loads such as data centres.

The role of data centres is rapidly changing, and we are updating our modelling capability to improve our understanding of this area and the extent to which energy efficiency may mitigate the sharp increases expected in some scenarios. Overall, the share of final demand will drive additional growth and investment in our electricity network while resulting in lower demand for our gas network.

3. Energy supply structure will continue to shift
There will be a global shift to power generation from renewable and low carbon sources. We are seeing a resurgence of interest in nuclear, including next generation technologies like small modular reactors, although they are not yet cost competitive.

4. Pathways will adapt to global and local realities
Both the UK and US elected new governments in 2024, leading to energy policy changes. The US Federal Government is focused on achieving economic growth and security through energy abundance, with a focus on natural gas and energy infrastructure, and has paused offshore wind leasing, while our States continue to pursue climate targets and policies.

In the UK, the Government is pursuing an accelerated power sector decarbonisation agenda, with an ambitious role for offshore wind (including a target of 50 GW by 2030). We expect different energy transition pathways in different jurisdictions.

5. CTP achievement will be challenging in slower scenarios

Each scenario is different, and in some we will not be able to meet our targets. It is important to recognise that the non-delivery of, or delay in, policy, regulation and other dependencies on which achieving our targets are contingent, will impact our capability to achieve our targets.

None of the transition scenarios tested threaten the Group's resilience, and we are well positioned to adapt our portfolio to maximise the opportunities of the energy transition, with no significant risk of a material adjustment to the carrying amounts of assets and liabilities in the next annual reporting period.

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 70 – 74.**

Physical scenario modelling

We use Group-wide climate scenarios to directly assess our vulnerability to climate change. These scenarios consider society's progress toward limiting global temperature increases against pre-industrial levels, benchmarking against an average increase of 1.5°C, in keeping with the Paris Agreement. We have modelled the way in which our business could be directly impacted as a result of increasing physical climate impacts, including 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 territories.

Descriptions, assumption and inputs

The climate hazard data is sourced from the relevant national climate assessments in the US (CMIP5) and in the UK (UKCP18). Scenario data is 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.

Climate projections are inherently uncertain and are not meant to be construed as predictions of future climate. These uncertainties arise from incomplete understanding of earth's systems, natural variability, model limitations, and observational errors. Despite these uncertainties, this should not delay actions to mitigate or adapt to climate change.

Physical insights

The climate hazards most significant to us are summarised below.

Flooding

Definition	Vulnerability
Coastal flooding River flooding	Risk of power failure, accelerated asset corrosion, debris damage, equipment submersion and water infiltration, soil erosion

Cold weather

Definition	Vulnerability
Low temperatures Freeze thaws	Ice accretion overloading overhead lines, structural failure

Warm weather

Definition	Vulnerability
High temperatures Heatwaves	Risk of power failure, equipment overheating, warmer air temperatures contributing toward accelerated ageing, reduced capacity of transmission and distribution lines

High winds

Definition	Vulnerability
High winds	Structural failure to overhead lines due to extreme wind exceeding design standard and vegetation contact

Outputs

Most hazards are projected to increase in frequency in the future, with high temperatures and coastal and river 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 most of our existing asset portfolio although the CCRT does not currently include NGED and NGV UK's assets. 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. The outputs are used in the Group-level Climate Vulnerability Assessment (CVA).

Wildfires have been an impactful climate hazard in areas around the world such as the western United States. While the risk of major wildfires spreading is lower in National Grid's service territory, we have taken steps to improve situational awareness and refine operating procedures in the event of a wildfire in our territories in the UK and US. Additional assessments are planned and underway to better understand potential vulnerabilities and develop mitigations.

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

Climate Vulnerability Assessment (CVA)

Using the CCRT outputs and insights, we also conduct a Group-wide CVA which 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 Group's assets and improve reliability for customers.

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. We use the outputs of the CCRT as a basis for this assessment where possible.

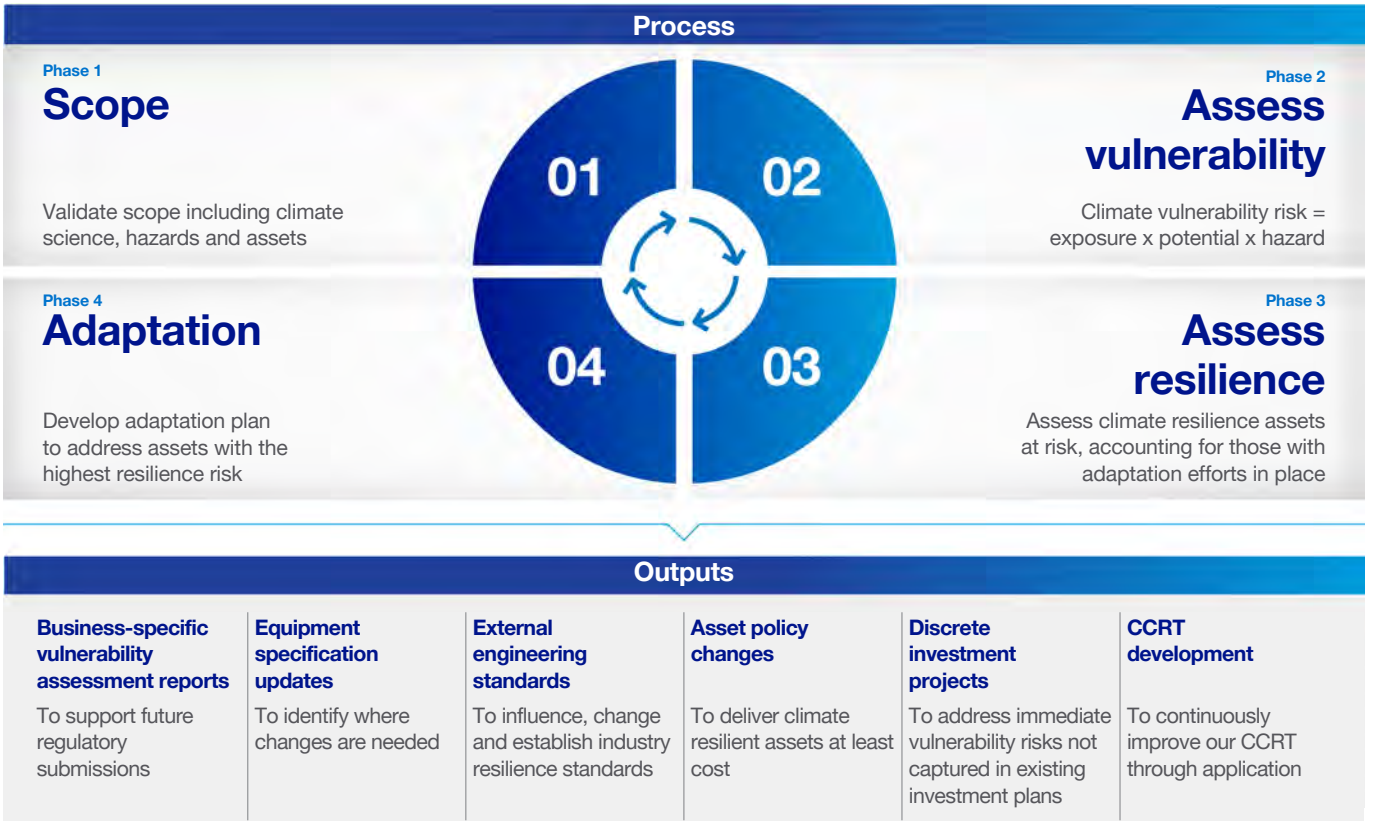
It is a phased programme of activity which will deliver an adaptation plan to address assets with the highest resilience risk. Sharing best practice with other energy utilities informs our approach and the ongoing development of our industry-leading CCRT. Our tool was recognised by the Centre for Climate and Energy Solution (C2ES) for climate change innovation.

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 38.

In addition to the Group-wide assessment, each business unit conducts climate resilience or adaptation assessments per their regulatory requirements, which are discussed further on page 74.

CVA process methodology and outputs



03 Risk management

Climate change has been integrated into our Enterprise Risk Management (ERM) processes for several years

Climate change and ERM

Climate change is a key risk factor for the Group and we have integrated it into our ERM process. Our ERM framework and process consider 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, which remains consistent with the prior year (refer to page 34).

For our climate change Group Principal Risks (GPRs) 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 36).

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 38).

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.

In addition to the two main GPRs above, other GPRs influenced by climate-related transition and physical risks include 'Upstream supply' and 'Major capital programmes' which are more pronounced in a 1.5°C scenario and require proactive measures. The risk of a 'Significant safety or environmental event' is partly linked to physical climate risks, necessitating strict safety and environmental practices. Acute physical risks are currently occurring and are anticipated to increase in frequency and severity, with significant risks projected over a longer horizon, particularly in a 4°C scenario.

We continue to develop our risk and opportunity horizon scanning to assess critical trends in the energy transition. With input from our senior stakeholders and external risk experts, key indicators and metrics are measured monthly against thresholds and analysed against our current strategy and business plans. Emerging risks are managed under our risk management framework with results reviewed by senior leadership (refer to page 41).

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 34.

Group's Risk Taxonomy

The Group's Risk Taxonomy 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. All GPRs are considered the most important risks and we do not prioritise.

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.

How we manage and monitor 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 Risk Officer 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; while 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.

Assessing our Climate-related financial risks and opportunities

Our Group risks are rated on a scale of 1 to 5 across three categories: financial, reputation and likelihood. The financial ratings correlate to financial bandings from low to high and our reputational impact categories scale from 'internal' to 'international'. This approach is consistent with our Group Principal Risks and the Principal Risk stress testing conducted as part of our Viability Statement on page 93. Then the overall indicative risk score is calculated by multiplying likelihood (see below for scaling details) by the greater of financial or reputational impact score. For our TCFD disclosures we then expand on this internal analysis of impact, timeframe and likelihood for each risk and opportunity to overlay additional market data and input from subject matter experts across the Group.

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

Our material climate-related risks and opportunities

Time horizons 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 that are financially material.

Time horizons

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

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

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

Likelihood

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.

1. Transition Risk

Demand for natural gas is expected to reduce in the long term

Risk/opportunity

Policy and Legal

There is an important future role for gas in our US jurisdictions, including the gas assets we own and operate today. In the long term, our energy networks will need to decarbonise to achieve net zero targets. The future role of gas will depend on economic, technological, legal, policy, and regulatory developments.

Over the next decade, demand for natural gas in our US jurisdictions will remain strong, driven by affordability and economic development priorities of our stakeholders and customers. In the longer term, pathways toward net zero targets assume significant electrification, including heating, which would increase electric load and reduce gas demand. This has a bearing on the useful economic lives (UELs) and elements of our gas network assets.

Business units potentially affected:

NY and NE

Asset group(s) potentially affected:

Gas Distribution and Generation

Timeframe (term):

Likelihood:

Measurement indicators:

- Gas UEL sensitivities
- GHG emissions
- CTP

Potential impact

Heat pump adoption is a good indicator of electrification trends, and therefore likely future demand for gas. In September 2024, National Grid reviewed heat pump adoption. We found that it lags state targets and is driven almost entirely by subsidies. Massachusetts has installed 90,384 heat pumps towards a 2030 target of 500,000, while New York has installed around 58,937 against a target of one to two million homes.

Frequent cold weather events in parts of NY and MA are also driving continued use of the gas network. For example, in January 2025, MA experienced a cold snap during which demand for gas heating was so high that multiple peak-serving LNG storage assets were needed. This spike in demand brought high heating bills and affordability concerns, particularly for low-income customers, into sharp focus. In response, the MA Department of Environmental Protection directed the programme administrators to cut $500m from the three year budget for the statewide plan to accelerate the pace of heat pump adoption. As extreme cold weather events are likely to reoccur in the future, continued use of the gas network is more likely as some customers adopt partial heat pumps and retain gas connections as backup.

Besides heat pump adoption, substantial investments into the electric network would be required to reduce gas reliance. In New York, scenarios meeting 2050 emission targets project residential bill increases significantly, while in Massachusetts, peak electric load is expected to rise from 4.9 GW today to 10.7 GW by 2050 if state electrification goals are achieved. Full electrification scenarios appear unlikely due to high costs, customers opting for gas, and existing challenges on the electric infrastructure to support increasing load in the short term.

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. Please refer to note 13 Property Plant and Equipment on page 199 – 201 for more details.

Our response

In assessing the UELs of our gas network assets, we consider a range of different pathways for the future of gas demand. These account for customer behaviour, fuel decarbonisation options, and feasibility and affordability of electrification, as well as the net zero ambitions and our jurisdictions' targets.

Although NY and MA's preferred pathways to achieve net zero is focused on large scale full electrification, safety and reliability of the gas network remains a key priority for National Grid and its regulators, as demonstrated by increased investment in our gas infrastructure and allowed recovery of these investments.

While New York's Climate Leadership and Community Protection Act (CLCPA) and Massachusetts' Clean Energy and Climate Plan (CECP) call for fossil free energy by 2050, we note challenges meeting interim targets.

As stated in the recent KEDNY and KEDLI Rate Order, the NY Public Service Commission has acknowledged that "it is impossible at this time to accurately predict the nature of the Companies' gas business in 2050 and whether any continuing use will be made of the Companies' gas distribution system." Alternative pathways proposed in regulatory proceedings exist, which if taken, would suggest a continued use for gas assets, whether as a backup source during the coldest winter days or a significant heating source using alternative low carbon fuels.

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 2026.

2. Transition Risk

Uncertainty in the extent of electricity demand growth

Risk/opportunity

Market, Policy and Legal

While we expect electric demand growth in all scenarios, there is uncertainty about the scale of electricity demand growth in the face of potential political (including regulatory and legal mechanisms), technological or societal trends.
For example, the recent boom in interest in generative AI has generated forecasts of significantly increased electric load growth.
The uncertainty about the extent of efficiency improvements limits our ability to predict the exact impact on our networks.

Business units potentially affected:

All

Asset group(s) potentially affected:

Electrical Distribution and Transmission

Timeframe (term):

Short	Medium	Long
	■	■

Likelihood:

Very low	Low	Moderate	High	Very high
		◆		

Measurement indicators:

- Network reliability
- UK and US power networks
- IFRS 8 capital investments

Potential impact

If we underestimate demand, there is a risk that the transmission and distribution networks we operate in the UK and US may not be adequately prepared to handle the substantial growth in electricity demand necessary to achieve net zero. This shortfall could hinder our ability to meet future energy needs, potentially compromising our sustainability goals and the reliability of our services.

If we overestimate demand, there is a risk that we build surplus assets. This excess can lead to inefficiencies and misallocated resources, ultimately undermining the trust and confidence of both consumers and regulators.

Such a scenario could result in negative perceptions of our ability to accurately forecast and manage demand, potentially damaging our reputation and credibility in the market.

Given this risk would likely materialise over the medium to long term, it is not possible to reliably quantify this risk at this time.

Our response

Clear policy commitments and pathways mitigate uncertainty by providing a focal point for the industry. We maintain close stakeholder relationships across wider industry and government to anticipate the extent of electric demand growth, and influence enabling policy.

We also have internal analytics teams to model different futures with varying electric demand growth.

We use this proprietary analysis, combined with decades of experience in energy infrastructure development, to plan for the future. Where possible, we include flexibility in our plans to allow us to respond to changing needs.

To mitigate the risk of under or overbuild, we work closely with regulators and system planners. In the UK, we have been pushing for a framework for anticipatory investment to ensure we are able to meet new connections and electrification on time and efficiently. Ofgem accepted this in its ED3 framework decision document, and we will now work together on the details. In both the UK and US, we are making no-regret anticipatory investment to meet the demand for connections.

To mitigate overbuild, in UK ED, the DSO governance panel is charged with ensuring all distribution network build is essential and that all other options for deferral (such as flexibility) have been considered first.

In ET, our RIIO-T3 regulatory plan to Ofgem will enable us to respond to changing need.

In the US, we prioritise investment based on current system performance, engineering planning needs, and execution strategy, while continuing to identify and pursue ways to efficiently deliver a secure, affordable and clean energy future, including through the use of energy efficiency, demand response, and other forms of non-wires alternatives.

We regularly measure and report our network reliability across the transmission, distribution and interconnection network (refer to page 21).

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

3. Transition Risk

There are several factors which affect our ability to deliver our commitments, including supply chain, talent and finance

Risk/opportunity

Reputation and Market

Delivering an unprecedented transformation of the energy system comes with delivery risk. We rely on supply chains, talent, and finance to play our part in this transformation.

If we are unable to deliver the energy networks of the future where they are needed, when they are needed, wider societal decarbonisation goals are jeopardised.

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.

Business units potentially affected:

All

Asset group(s) potentially affected:

Electrical Distribution and Transmission. Gas Distribution.

Timeframe (term):

Likelihood:

Measurement indicators:

- GHG emissions
- Network reliability
- Renewable capacity additions
- Proportion of renewables in energy mix
- EU Taxonomy-aligned capital expenditure
- Customer satisfaction (US)
- Cumulative green bonds on issue
- IFRS 8 capital investments
- Supply chain engagement

Potential impact

Our businesses in the US and UK both depend on, and compete in, a global market for green finance, supply chains and talent.

If we are unable to compete effectively for talent, or purchase equipment in the right timeframes, we could also fail to deliver the major network reinforcement needed.

It is also crucial that we have investable regulatory frameworks with the right return on and of capital. Failure to attract investors could undermine our ability to deliver the necessary investments and result in materially lower financial performance.

Our share price and EPS projections could be impacted due to loss of incentives or incurrence of penalties. It is not possible to reliably measure the impact currently.

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 energy transition. Every sector of the economy, as well as our customers, rely on the energy sector to enable their decarbonisation plans. The ability to connect to our transmission and distribution networks in a timely manner is critical.

Given this risk would likely materialise over the medium to long term, it is not possible to reliably quantify this risk at this time.

Our response

We are focused on working with regulators to get investable frameworks in place in all our jurisdictions.

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 (refer to pages 121 to 149).

The Group CTP sets out our revised roadmap to a vision of reaching net zero. We continue to work closely with stakeholders, including regulators, to ensure policy and regulatory frameworks enable and facilitate our net zero plans.

We have a strategic priority to 'build tomorrow's workforce today' to ensure we have the talent we need to deliver the transition. Our focus areas include strong entry level programmes, including graduates, interns and apprentices, as well as development programmes for our senior leaders.

In UK ET, our supply chain task force, launched in April 2024, ensures we are able to deliver infrastructure at pace, and has taken major steps to transform the way we think about our supply chain. Recently, we launched a new regional supply chain model for substations offering suppliers long-term commitments in a more collaborative way of working. This is in addition to our Great Grid Partnership, a collaborative £9bn supply chain framework with seven partners, enabling us to pool resources, skills, insights and experience to deliver our ASTI programme efficiently in this tight supply chain environment. Ofgem also introduced a £4bn Advanced Procurement Mechanism (APM), enabling us to secure critical equipment and services.

We also engage with our top suppliers by emissions to establish action plans and commitments towards a SBT (refer to page 46).

4. Transition Opportunity

Increased demand for electricity, even in our slowest decarbonising scenarios

Risk/opportunity

Market

National Grid is well positioned to capitalise on the significant growth opportunities associated with the increased demand for electricity in the UK and US. As electricity supply grows to meet increasing demand, we will have a central role to play in connecting new sources of energy to end users via our networks.

Products/Services

This transformational period in the energy sector presents a significant opportunity to invest in innovative solutions to decarbonise our network and reap the rewards of those investments as these technologies scale.

Business units potentially affected:

All

Asset group(s) potentially affected:

Electrical Distribution and Transmission, NGV Interconnectors and NGP investments

Timeframe (term):

Likelihood:

Measurement indicators:

- Network efficiency and reliability
- Renewable capacity additions
- Proportion of renewables in energy mix
- EU Taxonomy green capex ratio
- Investment in research and development
- National Grid Partners investment

Potential impact

While the pace and scale of electrification growth depends on a range of factors, the positive trajectory is clear, and so is the corresponding need for growth in electricity networks.

In the UK, the Government has announced its Clean Power 2030 (CP2030) Plan, which will see clean power sources produce at least as much power as Great Britain consumes over the whole year, and at least 95% of Great Britain's generation in 2030. In the US, our states have established targets for clean energy supply and consumer electrification, and our networks will play a key role in facilitating these plans.

Leveraging these opportunities for the Group will significantly enhance capital investment and growth, thereby increasing Group profit and EPS. This is the key driver of our five-year financial framework, forecasting a 6-8% CAGR in underlying EPS to 2028/29, from a 2024/25 baseline.

Within this, NGV has the potential to benefit from significant investment opportunities in both the UK and US, including interconnectors and competitive transmission to transport increasing levels of electricity.

In particular, National Grid is a leader in developing electricity interconnector projects to connect Great Britain with other European countries. By enablling cross-border electricity trade, interconnectors can displace fossil fuel generation in favour of renewable energy, reducing the CO_2e intensity of the energy mix, while generating revenue for National Grid. In addition, interconnection to countries like Norway with flexible controllable generation, enables more effective integration of intermittent renewable generation in GB. The UK Government's CP2030 plan assumes c.12 GW of interconnector capacity will be required, up from just under 10 GW today.

Our response

To maximise these opportunities we are evolving our strategy to focus on networks and streamlining our business. In May 2024, we announced our intention to sell Grain LNG, our UK LNG business, and National Grid Renewables, our US onshore renewables business. We plan to invest around £60 billion from April 2024 to March 2029, including an ambitious £51 billion 'Green Capex' ambition[1], making us one of the FTSE's biggest investors in net zero delivery. This will be split broadly evenly across the UK and US Northeast, with around 80% of the investment expected to be in electricity networks over the five years, continuing the Group's shift towards electric, with nearly 80% of Group assets expected to be electric by 2029.

In ET, we submitted a business plan to Ofgem that will deliver the most significant advancement in the UK's transmission network in a generation. In ED, our January ED3 Framework Consultation Open Letter emphasised the need for a transformative approach to electricity distribution networks to achieve the UK's climate targets.

In New England, the Massachusetts Department of Public Utilities approved our Electric Sector Modernization Plan (ESMP) as a 'strategic plan', which outlines around $2 billion in anticipatory investments in the electrical distribution system. In New York, we began upgrading 1,000 miles of grid to help deliver over 4 GW of more resilient, clean and secure energy.

In NGV, we received regulatory approval for the LionLink (1.8 GW) offshore hybrid asset (OHA), marking a major milestone in connecting the national electricity transmission system and offshore wind farms based in Dutch waters.

Through our corporate venture capital arm, National Grid Partners, we capitalise on this transition opportunity, investing in and helping develop startups at the intersection of energy and emerging technology, allowing National Grid to benefit operationally and strategically as we scale them across our business and industry. Since its 2018 founding, National Grid Partners has invested more than $500 million in over 50 startups and strategic funds, with seven successful exits. More than 80% of the startups in the National Grid Partners portfolio are strategically engaged with National Grid business units to help solve today's challenges and create tomorrow's energy systems.

For example, in New York and Wales, we have deployed dynamic line rating (DLR) technology on our transmission lines in collaboration with our portfolio company, LineVision. The technology provides condition-specific line ratings to our transmission control room, allowing us to maximise the power transmitted on our lines without compromising safety.

1. Aligned to principles of EU Taxonomy, directly invested into the decarbonisation of energy networks.

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

5. Physical Risk

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

Risk/opportunity

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 units potentially affected:

All

Asset group(s) potentially affected:

Electrical Distribution and Transmission. Gas Distribution.

Timeframe (term):

Likelihood:

Measurement indicators:

- Network reliability
- Major storm costs
- CCRT outputs
- Research outputs from innovation projects
- EU Taxonomy climate adaptation capex

Potential impact

Under our US regulatory frameworks and agreements, major storm costs become recoverable in future years once the deferrable criteria are met. This year, we incurred costs due to asset damage and operational interruptions from major storms, totalling £87 million (2023/24: £226 million). More details on our major storm costs can be found on pages 280 - 290 in the 'Other unaudited financial information' section. Allowances for recovering costs from other US weather events are included within the base rates determined at the outset of each rate filing period. In the UK we can recover storm costs over a predetermined threshold through re-opener mechanisms in our price control frameworks, allowing adjustments to allowed revenues to cover unexpected expenses from severe weather events.

At the end of 2023, Niagara Mohawk Power Corporation submitted its Climate Change Resilience Plan (CCRP) to the NYPSC, which assessed the vulnerability of the Company's electric infrastructure to climate-related risks. The plan was approved by the NYPSC in December 2024. The study identified a capital investment of approximately $243 million in resilience programmes over a five-year period (2026-2030), with cumulative investments projected to reach about $566 million by the tenth year (2026-2035) and $1.39 billion by the twentieth year (2026-2045). The revenue requirements for these resilience investments are expected to result in total bill increases of 0.02% in 2025/26 to 0.66% in 2029/30 compared to current rates across all service classes.

In Massachusetts, the Department of Public Utilities (DPU) has requested businesses to submit climate mitigation and adaptation plans outlining their responses to climate change. In response, our Massachusetts Electricity Distribution business published a CVA in February 2025, which will serve as the foundation for a comprehensive resilience plan.

In 2025, all our business units with UK operations have submitted a climate change adaptation report under DEFRA's Adaptation Reporting Power 4.

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 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 CCRT 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 confirming the strategic approach to managing those risks.

From October, the new five-year rate case plan for our Massachusetts electric business took effect, which includes an annual increase of $41.6 million in storm cost recovery within base rates, as well as an additional $18 million through the Storm Fund Replenishment Factor.

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

As part of our UK ET T3 business plan, we have committed to implementing a new resilience modelling approach and publishing a Climate Adaptation Strategy by 2026.

We continue to invest in climate adaptation across the Group in the form of storm hardening and flood defences, with a further £57 million (2023/24: £30 million) invested in the year. Such investments should increase our ability to withstand disruptive events, and improve our organisational capability to reduce the magnitude and/or duration of such events.

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.

04 Metrics and targets

As part of our Responsible Business reporting and disclosures, we track and manage our GHG emissions performance and metrics related to 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. Our near-term targets are based on the latest climate science and aligned with our regions' emissions goals. They are approved by the SBTi as aligned to their 1.5°C pathway and the ambition of the Paris Agreement. We believe our long-term net zero target aligns with the key principles of the SBTi's corporate net zero standard; however, we cannot formally validate this due to the absence of a sector pathway for heat and the power sector guidance not accounting for the necessary infrastructure growth for electricity decarbonisation. Having engaged with the SBTi to discuss these issues, we look forward to supporting the standard's future development and will submit our feedback on the SBTi Corporate Net-Zero Standard Version 2.0 Initial Consultation Draft.

The table on page 77 outlines our GHG emission reduction targets, along with an index of the key quantitative measurement indicators used to manage our climate-related financial risks and opportunities. For further information and insights on our performance in reducing our GHG emission, please refer to page 45. We are clear in our CTP that we did not expect emissions reductions to be a linear trajectory and a significant portion of our emissions are outside of our direct control. This section also expands on how 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 monitor our climate-related metrics and targets to ensure that the data we measure is meaningful, aligns with our strategy, and provides the necessary information for effective performance monitoring and progress demonstration. By integrating these metrics into our financial Enterprise Performance Management (EPM) processes, it allows us to assess GHG reduction performance in the context of wider enterprise performance. Our annual Financial Strategy and Strategic Business Planning cycle includes mechanisms to track business units' plans against our SBTi glidepaths. Our monitoring and reporting processes incorporate internal controls and a team of technical consultants reviewed our CTP publication for accuracy, consistency and any material discrepancies.

All of our GHG emissions are reported on a gross basis. While our focus is on decarbonising our business in line with a 1.5°C reduction pathway, we do not plan to use carbon offsetting to meet our near-term SBTs. However, we do use limited carbon offsets to help our emission reduction efforts. We follow SBTi guidelines and buy high quality carbon credits to offset GHG emissions we cannot reduce further, as per our internal carbon offsetting policy. We use a mix of nature-based, technological and hybrid offsetting projects, ensuring they are permanent and where possible verified by a third party. In 2024, NGET established a cross-functional carbon compensation steering committee to oversee the purchase of high quality carbon credits to meet our regulatory commitment for construction emissions.

The 2022 Long-Term Performance Plan (LTPP), covering the period ending 31 March 2025, is our first to incorporate emissions and energy transformation metrics. These elements of the 2022 LTPP outturned at 89.5% of maximum, driven by achievement of 100% of maximum for Scope 1 emissions and 79.0% of maximum for enablement of energy transformation, both weighted equally. The Scope 1 emissions outturn at maximum was driven by SF6 emission reductions, vehicle fleet emissions and Grain operation emissions reduction. The strong enablement of energy transformation performance was driven by energy efficiency programmes and distribution connections. The 2023, 2024 and 2025 LTPP awards will be measured over their respective three year performance periods and include a 20% weighting on energy transformation measures that includes the reduction of Scope 1 emissions and strategic initiative on energy transformation enablement. For further details on our LTPP awards, please refer to the Directors' Remuneration Report on pages 121 to 149.

In addition to metrics laid out in the following page, we have disclosed the proportion of IFRS revenue, operating expenditure and capital expenditure that align with the principles of the climate change mitigation and adaptation objectives of the EU Taxonomy. 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 2025. For further details see our EU Taxonomy report and Responsible Business data tables on our website.

A significant proportion of our Scope 1 GHG 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 GHG emissions at Grain LNG terminal are subject to the UK Emissions Trading Scheme and in the US GHG emissions from our Long Island Power Generation plant are subject to the Regional Greenhouse Gas Initiative. We have a regulatory incentive to reduce SF_6 leaks from our electric equipment, a key component of our Scope 1 GHG emissions in the UK, that utilise a non-traded cost of carbon as part of the incentive calculation.

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.

On the next page we include our GHG emissions footprint, a key indicator against our climate-related risks and opportunities.

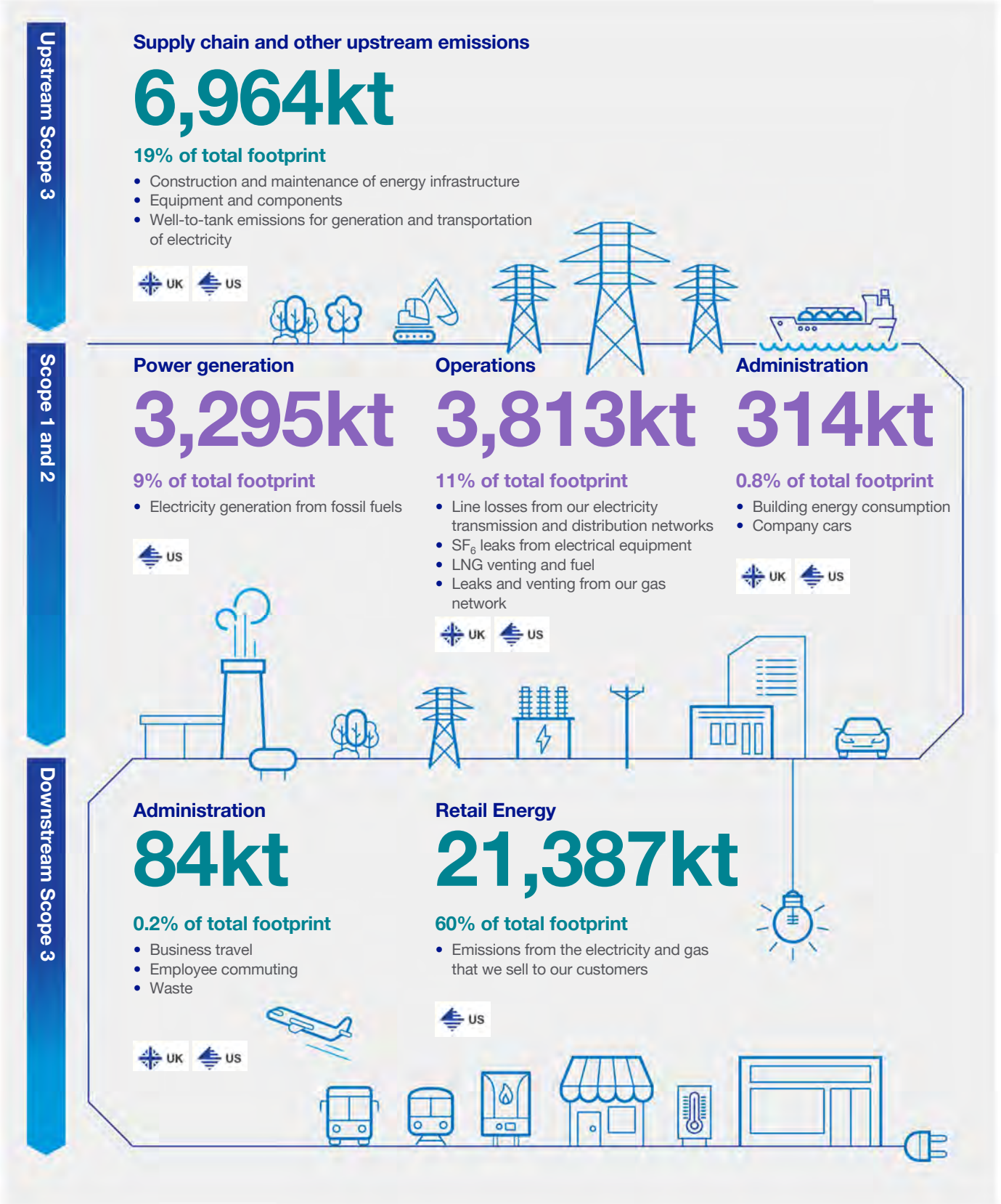
EU Taxonomy report

Responsible Business data tables

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

Our 2024/25 GHG emissions footprint across direct and indirect sources was 35,857 $ktCO_2e$

Scope 1 GHG emissions are direct emissions from sources owned by National Grid. Scope 2 and 3 GHG emissions are indirect and result from National grid activities from sources we do not own or control.



Index of climate-related quantitative measurement indicators[1]

In the last year our emissions have risen, due to factors outside of our control and despite our efforts to reduce emissions where we have control. Refer to pages 44-47 for further details.

	2024/25	2023/24	2022/23
SBTi validated GHG emissions reduction targets			
Reduce absolute Scope 1 and 2 GHG emissions by 60% by 2030[2,3]	**(4.4)%**	(11.8)%	
Reduce absolute Scope 1 and 2 GHG emissions excluding generation by 50% by 2030[2,3]	**(14.7)%**	(14.4)%	
Reduce the carbon intensity of our power generation (Scope 1 GHG emissions) by 90% by 2030, and by 92% by 2033[3]	**(36.7)%**	(34.7)%	
Reduce the carbon intensity of our power generation and sold electricity (Scope 1 and Scope 3 GHG emissions) by 86% by 2033[3]	**(18.3)%**	(15.4)%	
Reduce absolute GHG emissions for all Scope 3, excluding sold electricity, by 37.5% by 2033[4]	**5.8 %**	0.8%	
Reduce absolute GHG emissions from gas sold by third-parties by 37.5% by 2033[4,5]	**(10.5)%**	(17.6)%	
Key climate-related metrics			
Scope 1 GHG emissions ($ktCO_2e$)	**4,467**	3,988	4,408
Scope 2 GHG emissions ($ktCO_2e$, location based)	**2,955**	2,864	2,876
Total Scope 1 and 2 GHG emissions[2] ($ktCO_2e$)	**7,422**	6,852	7,284
Scope 3 GHG emissions ($ktCO_2e$)	**28,435**	27,384	27,867
Total Scope 1, 2 and 3 GHG emissions[2] (full value chain) ($ktCO_2e$)	**35,857**	34,236	35,151
Intensity ratio: Scope 1 and 2 GHG emissions per million of revenue[2] (tCO_2e/£m)	**427**	345	337
Climate change adaptation capex (EU Taxonomy aligned activities, £m)	**57**	30	31
Climate change mitigation capex (EU Taxonomy aligned activities, £m)	**7,610**	5,962	5,526
Group energy consumption from fossil fuel generation (GWh)	**17,390**	14,375	15,892
Group energy consumption from electricity systems line losses (GWh)	**15,514**	14,519	15,746
Group energy consumption excluding fossil fuel generation and electricity systems line losses (GWh)	**1,916**	2,547	2,835
Total Group energy consumption (GWh)	**34,820**	31,441	34,473
UK energy consumption from electricity systems line losses (GWh)	**10,413**	10,046	10,392
UK energy consumption excluding electricity systems losses (GWh)	**790**	1,297	1,770
Total UK energy consumption (GWh)	**11,203**	11,343	12,162
UK Scope 1 GHG emissions ($ktCO_2e$)	**278**	377	398
UK Scope 2 GHG emissions[2] ($ktCO_2e$)	**2,137**	2,113	2,094
Total UK Scope 1 and 2 GHG emissions[2] ($ktCO_2e$)	**2,415**	2,490	2,492

2024/25 data externally assured by Deloitte. 2023/24 data externally assured by PwC.

1. Refer to our Responsible Business Reporting Methodology on our website for calculation details. Target year 20Yn indicates that the performance will be reported in the financial year that aligns with the year 20Yn/Yn+1. Our methodology outlines the application of the operational control principle from the GHG Protocol across all emissions and environmental metrics. Newly sold or disposed operations will be excluded from our reporting starting from the year they exit the Group. Consequently, National Grid ESO is excluded from our reported GHG emissions boundary. Please refer to note 1. Basis of preparation and recent accounting developments, part D 'Disposal of the UK Electricity System Operator (ESO)' within our notes to the consolidated financial statements for details of our ESO related accounting policies and judgements.
2. Includes Scope 2 location-based emissions only as line losses make up the vast majority of these emissions and we have limited renewable electricity certificates and other contractual instruments in place. 2024/25 excludes National Grid ESO.
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.

Note: The above data together with our 'Climate change – Scope 1, 2 and 3 emissions' KPIs on page 45 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 greater 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. Amounts are presented in GWh, with 1 GWh=1,000,000 kWh.

Non-financial and sustainability information statement

This page contains disclosures in compliance with sections 414CA and 414CB of the Companies Act 2006.

The information listed below is incorporated by cross-reference.

Environmental matters	44 – 47 59 – 77
Our employees	18 – 21 51 – 54 106 – 107
Social matters	48 – 50
Human rights	56 277
Anti-corruption and anti-bribery	56 - 57

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

Business model	8 – 10
KPIs	18 – 21
Our stakeholders	22 – 24
People & Governance Committee report	110 – 111
TCFD	59 – 77
Risks	34 – 41

Further reading	Environment	Social matters and employees	Anti-corruption and bribery	Human rights
Our policies and due diligence	11 – 17 and 36	11 – 17 and 37	56 - 57	56
Outcomes	18 – 21 and 25 – 33	18 – 21 and 25 – 33		

	CA 2006 requirement	TCFD recommendation
Governance	Section 414CB (2A)(a)	a) Describe the Board's oversight of climate-related risks and opportunities: pages 60 – 61
		b) Describe management's role in assessing and managing climate-related risks and opportunities: pages 61 – 62
Risk Management	Section 414CB (2A)(b)	a) We describe the organisation's processes for identifying and assessing climate-related risks: page 69
		b) We describe the organisation's processes for managing climate related risks: page 69
	Section 414CB (2A)(c)	c) We describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management: pages 69 – 74

	CA 2006 requirement	TCFD recommendation
Strategy	Section 414CB (2A)(d)	a) We describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term: pages 70 – 74
	Section 414CB (2A)(e)	b) We describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning: pages 70 – 74
	Section 414CB (2A)(f)	c) We describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario: pages 63 – 68
Metrics & Targets	Section 414CB (2A)(h)	a) Our metrics used to assess climate-related risks and opportunities in line with our strategy and risk management processes: page 75
	N/A	b) Our Scope 1, Scope 2 and Scope 3 greenhouse gas (GHG) emissions and the related risks: pages 45, 75 – 77
	Section 414CB (2A)(g)	c) Our targets used to manage climate-related risks and opportunities and performance against targets: pages 75 and 77