Doing Right Now

Fairness and affordability

We are committed to delivering energy safely, reliably and affordably to the communities we serve. As well as affordability, we will play our role in ensuring no one is left behind in the short term due to increased energy prices, or in the longer-term transition to clean energy.

Financial Statements

Financial Statements

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and Accounts, including the Group financial statements and the Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law, the Directors are required to prepare the Group financial statements in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards (IFRS) as adopted by the UK. The financial statements also comply with IFRS as issued by the IASB. In addition, the Directors have elected to prepare the Parent Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 'Reduced Disclosure Framework'. Under company law, the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of the profit or loss of the Group and Parent Company for that period.

In preparing the Group financial statements, International Accounting Standard 1 requires that Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Group's ability to continue as a going concern.

In preparing the Parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Parent Company on a consolidated and individual basis, and to enable them to ensure that the Group financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Parent Company and its subsidiaries and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Having made the requisite enquiries, so far as the Directors in office at the date of the approval of this Report are aware, there is no relevant audit information of which the auditors are unaware and each Director has taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

Each of the Directors, whose names and functions are listed on pages 88 – 89, confirms that:

- to the best of their knowledge, the Group financial statements and the Parent Company financial statements, which have been prepared in accordance with IFRS as issued by the IASB and IFRS as adopted by the UK and UK GAAP FRS 101 respectively, give a true and fair view of the assets, liabilities, financial position and profit of the Company on a consolidated and individual basis;
- to the best of their knowledge, the Strategic Report contained in the Annual Report and Accounts includes a fair review of the development and performance of the business and the position of the Company on a consolidated and individual basis, together with a description of the principal risks and uncertainties that it faces; and
- they consider that the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

This Responsibilities Statement was approved by the Board and signed on its behalf.

Directors' Report

The Directors' Report, prepared in accordance with the requirements of the Companies Act 2006 and the UK Listing Authority's Listing Rules, and Disclosure Rules and Transparency Rules, comprising pages 1 – 131 and 242 – 288, was approved by the Board and signed on its behalf.

Strategic Report

The Strategic Report, comprising pages 1 – 83, was approved by the Board and signed on its behalf.

By order of the Board

Justine Campbell
Group General Counsel & Company Secretary

18 May 2022

Company number: 04031152

Independent Auditor's Report to the members of National Grid plc

Report on the audit of the financial statements

1. Opinion

In our opinion:

- the financial statements of National Grid plc (the 'Parent Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 March 2022 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB);
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 *'Reduced Disclosure Framework'*; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

Group:

- the consolidated income statement;
- the consolidated statement of comprehensive income;
- the consolidated statement of changes in equity;
- the consolidated statement of financial position;
- the consolidated cash flow statement; and
- the related notes 1 to 38 to the consolidated financial statements.

Parent Company:

- the Company accounting policies;
- the Company balance sheet;
- the Company statement of changes in equity; and
- the related notes 1 to 10 to the Company financial statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law, United Kingdom adopted international accounting standards and IFRS as issued by the IASB. The financial reporting framework that has been applied in the preparation of the Parent Company financial statements is applicable law and United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 'Reduced Disclosure Framework' (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group and Parent Company for the year are disclosed in note 4e to the consolidated financial statements and note 10 to the Company financial statements. We confirm that we have not provided any non-audit services that are prohibited by the FRC's Ethical Standard to the Group or the Parent Company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Materiality	The materiality that we used for the Group financial statements was £135 million which represents 4.9% of adjusted profit before tax (profit before tax from continuing operations, excluding the impact of reported exceptional items and remeasurements) and 4.1% of statutory profit before tax.
Scoping	Our scope covered eight components of the Group in addition to procedures performed at the Group level. Of these, five were subjected to a full-scope audit whilst the remaining three were subject to specific procedures on certain account balances. Our scoping covered 97% of the Group's revenue; 93% of the Group's profit before tax; and 98% of the Group's net assets.
Key audit matters	The key audit matters that we identified in the current year were: • Acquisition of Western Power Distribution (WPD) and impairment testing of the related WPD goodwill; and • Impact of climate change on property, plant and equipment. The following items were identified as key audit matters in the prior year but not in the current year: • 'Impact of COVID-19 including the recoverability of US trade and other receivables' has not been deemed to be a key audit matter this year as the impact is now well understood and there is a reduction in uncertainty. This reduces the impact on accounting judgements and on the way that we perform our audit; and • 'Treasury derivative transactions' has not been deemed a key audit matter this year. Although we continue to undertake a substantial amount of work to audit the Group's large Treasury function, there have been no significant matters identified in either the current or prior year, meaning we believe this can now be considered a more routine area of the audit. Following the acquisition of WPD during the year, we identified the acquisition accounting of WPD and the subsequent impairment testing of the goodwill recognised on acquisition as a key audit matter, given the size of the acquisition and the judgements applied by management in both the purchase price allocation (PPA) and the goodwill impairment testing.

Independent Auditor's Report to the members of National Grid plc continued

4. Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Our evaluation of the Directors' assessment of the Group's and Parent Company's ability to continue to adopt the going concern basis of accounting included:

- assessing the financing facilities including the nature of facilities, repayment terms and covenants;
- enquiring of management regarding the assumptions used in the going concern model;
- testing the clerical accuracy and appropriateness of the model used to prepare the forecasts;
- assessing the assumptions used in the forecasts;
- assessing management's identified potential mitigating actions and the appropriateness of the inclusion of these in the going concern assessment;
- assessing the historical accuracy of forecasts prepared by management;
- reading analyst reports, industry data and other external information to determine if it provided corroborative or contradictory evidence in relation to assumptions used;
- reperforming management's sensitivity analysis; and
- evaluating the disclosures made within the financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill

Key audit matter description

Account balance: Property, plant and equipment (PPE), Other intangible assets, Borrowings and Goodwill. Refer to notes 1F, 11, 35 and 37 to the financial statements and the Audit & Risk Committee's discussion on pages 101 – 105.

Acquisition of WPD (referred to as 'UK Electricity Distribution')

The acquisition of WPD completed on 14 June 2021. The Competition and Markets Authority (CMA) issued an Initial Enforcement Order (IEO) which required the WPD group to continue to be run independently from National Grid until it had completed its reviews. The CMA reviews were completed on 1 September 2021, at which point the restrictions put in place by the IEO were removed. The IEO restrictions meant there was judgement regarding the point at which National Grid assumed control of WPD. Management concluded that, based on the evaluated evidence, they assumed control from 14 June 2021 and consolidated WPD from that date.

Management, with support from third-party experts, performed an exercise to fair value the assets and liabilities acquired at the date of acquisition. The key balance sheet items fair valued included:

- PPE valued at £10,051 million, which implied a step-down of £4,026 million relative to the book value acquired. This represents a combination of an accounting adjustment to remove deferred customer contributions and a fair value step-down;
- licence intangible assets of £1,714 million; attributed to the licences to operate for each of the distribution network operators (DNOs) acquired; and
- non-current borrowings of £7,556 million; an increase of £1,589 million on pre-acquisition book value.

The difference between the consideration paid (£7,881 million) and the net fair values of the identified assets and liabilities acquired (£3,160 million) is recorded as goodwill of £4,721 million. Management concluded this represents the future expected growth of the WPD business, expected synergies from combining the business with National Grid and the expertise of the management team acquired.

The most significant judgements related to the allocation of value between PPE, the acquired licence intangibles and the residual goodwill recorded.

The fair value of the PPE assets was determined based on cash flows related to the existing asset base, including estimates regarding future expected outperformance, maintenance and replacement expenditure and regulatory returns. Given there is no future cash inflow related to assets which were funded by customer contributions, this resulted in an accounting adjustment of £2,754 million.

The fair value of the licence intangible assets was determined based on discounting the incremental cash flows relating to the licence. These cash flows were calculated by subtracting the cash flows attributable to PPE and goodwill from the cash flows for the business as a whole. The licence cash flows are dependent on multiple key assumptions including future expected outperformance, synergies, capital expenditure and regulatory returns which are subject to a high degree of uncertainty.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill continued

Key audit matter description continued

In determining these fair values, management is required to make significant estimates and judgements including those relating to the forecasts of future cash flows, terminal value and selection of the discount rate. Performing audit procedures to evaluate the appropriateness of management's determination of the acquisition date and the reasonableness of these estimates and assumptions required a high degree of auditor judgement and an increased extent of effort, including the need to involve our fair value specialists.

WPD goodwill impairment

Following the finalisation of the PPA, the WPD goodwill balance of £4,721 million was tested for impairment in line with the requirement in IAS 36 to perform an impairment review annually, starting in the year of acquisition. Due to volatility caused by macroeconomic events in the last three months of this financial year, management tested goodwill as at 31 March 2022 but will revert to 31 December in future periods.

As set out in note 11 to the financial statements, management prepared a discounted cash flow model to estimate the value-in-use and compared this to the carrying value; this indicated there was headroom and accordingly no impairment was recognised. The value-in-use was measured at the group of cash-generating units (CGU) level and the calculation was derived from multiple inputs to the model.

We performed risk assessment procedures and identified three key assumptions:

- **Totex forecasts** – The model used for the impairment test leverages the cash flow forecasts from the fair value allocation exercise and extends to 2050. Management forecast negative cash flows for a number of years due to the level of investment required to reinforce the networks to meet expected electricity demand in order to achieve the Company's and the UK's target to become net zero by 2050. The future forecast expenditure is therefore dependent on the increased demand for low-carbon technologies ('LCTs') including electric vehicles (EVs) and heat pumps which will require more connections on the distribution network. Given there are a number of potential pathways for the energy transition to 2050, including the extent of electrification, there is uncertainty in the level of future totex required.
- **Discount rate** – Management utilised a pre-tax discount rate of 5.2%. The discount rate should reflect the return required by the market and the risks inherent in the cash flows being discounted and accordingly should be independent of the actual capital structure of the business being assessed and the way in which the acquisition of the business was financed. There is a risk that management did not apply a reasonable discount rate, leading to a material misstatement of goodwill.
- **Terminal value** – In order to calculate the value of the business at the end of the forecast period in 2050, management have assumed an 'exit multiple' of Regulatory Asset Value (RAV) at that date. This is the equivalent of a nominal growth rate in perpetuity of 2.5%.

Changes in these assumptions could have a significant impact on the fair value and the amount of any impairment charge.

The impairment test of WPD goodwill involved significant assumptions including those used in the selection of the discount rate and the terminal value. Auditing these assumptions required a high degree of auditor judgement and increased extent of effort, including the need to involve more senior members of the team and our fair value specialists.

How the scope of our audit responded to the key audit matter

Acquisition of WPD

We have tested the controls over the accounting for the acquisition of WPD. This has included testing the review controls over the valuations and management's challenge of the estimates made.

We challenged the reasonableness of management's judgement regarding the date from when they assumed control, including reading correspondence with the regulators and the terms of the IEO, as well as searching for any contradictory evidence.

In respect of the overall acquired balance sheet, we:

- evaluated the appropriateness of the methodology applied in valuing the acquired assets and liabilities;
- determined the reasonableness of the values attributed to acquired assets and liabilities, with input from our valuations, tax, treasury and pension specialists;
- read the share purchase agreement; and
- vouched the consideration paid to bank statements.

In challenging management's judgements and estimates relating to the fair value allocations to PPE, intangible assets and goodwill, we:

- evaluated the fair value methodology used by management's experts, with input from our valuation specialists;
- assessed the competence and objectivity of management's experts;
- tested the integrity of the model used in determining the fair values; and
- compared significant assumptions to externally sourced information including from the regulator and other government bodies.

We also evaluated the appropriateness of the disclosures in the financial statements.

WPD goodwill impairment

We tested the controls over management's impairment review performed for the WPD business. In addition, we conducted the following substantive procedures.

Totex forecasts

- We understood the key totex assumptions in the model and challenged the basis of these by benchmarking the assumptions against third-party and relevant industry publications to inform our assessment of the nature, timing and extent of expected electrification in the UK.
- We evaluated the competence and objectivity of the third-party experts used by management to develop the totex forecasts.

5.1 Acquisition of WPD and impairment testing of the related WPD goodwill continued

How the scope of our audit responded to the key audit matter continued

Discount rate

- We engaged our valuation specialists to develop an independent range for a reasonable discount rate using relevant third-party market and peer data for the WPD business. We compared management's calculated rate to our reasonable range.

Terminal value

- We independently developed a reasonable range of RAV-based exit multiples using external data obtained for historical market transaction values.
- We independently recalculated the equivalent long-term nominal growth rate to assess the reasonableness of the rate compared to long-term growth forecasts for the UK economy.

Other

- We assessed whether the impairment methodology applied by management was acceptable under IFRS and tested the integrity and mechanical accuracy of the impairment model.
- We evaluated all key inputs, assumptions and datasets used in the model by benchmarking information to different industry and third-party publications.
- We assessed the accuracy of management's short-term forecasts by comparing to the latest historical financial information for WPD.
- We assessed whether management's impairment forecasts are consistent with other forecasts used by management, including the RIIO-ED2 business plan submitted to Ofgem.
- We evaluated all changes to key assumptions between the model used for the PPA exercise and the goodwill impairment test.
- We challenged management's disclosures in notes 1F, 11, 35 and 37 including in relation to the sensitivity of discount rate and terminal value disclosures.

Key observations

Acquisition of WPD

Our testing confirmed that relevant controls over management's significant judgements and estimates operated effectively.

We are satisfied:

- that it is appropriate for management to consolidate WPD from 14 June 2021;
- that management's methodology in valuing the acquired assets and liabilities is reasonable;
- that the fair values allocated to PPE, licence intangible assets, and goodwill, whilst judgemental, are reasonable; and
- that the disclosures relating to the acquisition in notes 1F and 37 are appropriate.

Goodwill impairment

Our testing confirmed that relevant controls over management's impairment test of WPD operated effectively.

Management's forecasts assume that for the next regulatory price control, which is yet to be approved by the regulator but will be applicable from 1 April 2024, the methodology will be consistent with recent regulatory publications. This is a reasonable assumption; however, should there be a significant change in the stability of the regulatory model that governs the performance of electricity distribution operators this could result in an impairment, as set out in note 11 to the financial statements.

Totex forecasts

For the purpose of the impairment test management has used forecasts for totex which represent a reasonable view of the extent of expected electrification in targeting net zero when compared with a range of scenarios in the public domain.

Discount rate

Management's pre-tax discount rate of 5.2% is towards the low end of the reasonable range determined by our specialists. The rate is a highly sensitive assumption and an increase in the pre-tax discount rate by 50 basis points would result in an impairment of £1,033 million, as set out in note 35 to the financial statements.

Terminal value

The RAV-based exit multiple used to determine the terminal value (equivalent to a 2.5% nominal growth rate in perpetuity) is within the reasonable range of multiples we have determined based on our assessment of historical market transactions. The value-in-use calculation is very sensitive to the terminal value as it represents 98% of the value-in-use on a post-tax basis. Reducing the terminal value to a level consistent with a 2% in perpetuity nominal growth rate would eliminate the headroom.

5.2 Impact of climate change on property, plant and equipment

Key audit matter description	Account balance: PPE. Refer to notes 1F and 13 to the financial statements and the Audit & Risk Committee's discussion on pages 101 – 105. The UK government and certain US states in which the Group operates have enacted legislation and established targets in respect of net zero carbon emissions by 2050. Accordingly climate change represents a strategic challenge for the Group, which has also set targets for reducing greenhouse gas emissions by the same date. Natural gas, when burned, emits carbon dioxide and is considered a greenhouse gas. Therefore, the strategic challenge relates to the potential future use of the Group's gas assets, which are used to facilitate gas transmission services in the UK and gas distribution services in the US in the period approaching 2050 and beyond. However, the Group announced the sale of the UK gas transmission business in March 2022 and since August 2021, it has been held for sale with the transaction expected to be completed in the third quarter of 2022/23. Accordingly, the useful lives of the UK gas transmission assets are no longer a risk for the Group and do not materially impact the results for the year. Therefore, our focus has been on the useful economic life of the Group's gas assets in the US, which is up to 80 years, extending well beyond the 2050 net zero commitment date. As the continued use of natural gas as a primary energy source beyond 2050 appears to be in conflict with net zero targets and the impact of shortening the useful lives of the gas assets to 2050 has a material impact on annual depreciation, there is an audit risk that management judgements taken to determine useful lives of US gas assets in the context of the net zero commitments are not reasonable. As described in note 13 to the financial statements, the impact of changing the useful economic lives of the gas assets in the US, such that they would be fully depreciated by 2050, would be an increase in the annual depreciation expense of £180 million. The Group announced in April 2022 that it is planning to eliminate fossil fuels from its gas and electric systems in New York state and Massachusetts by 2050, by decarbonising the gas network through the use of renewable natural gas (RNG) and green hydrogen. This commitment to eliminate entirely, fossil fuels from the gas network by 2050, includes clear and measurable internal milestones in the period up to 2050. Both New York and Massachusetts, the largest states in which the Group operates, announced climate action plans proposing that nearly all households change their heating systems to electricity by 2050. Management's vision, which will require legislative and regulatory support to implement, proposes a hybrid approach that they believe will enable customers to have more affordable energy solutions and allow customers to retain choice in how to achieve net zero. Although there are challenges and uncertainties around the sufficiency of RNG supply, as well as around the cost effectiveness and production of green hydrogen, as they are early stage technologies, management is of the view that a hybrid electric–gas heating system approach will be a practical and achievable pathway to meet the state and regional decarbonisation goals as well as the most affordable, reliable and practical solution to reduce emissions. This hybrid approach would mean there would be a need for the majority of the Group's US gas assets in the long term and hence there will be no need to shorten their useful economic lives. Management operated a control to assess the accounting impacts associated with climate change, including on the useful lives of the Group's US gas assets, to ensure these are considered and reflected appropriately in the financial statements. Management determined that disclosure of a key judgement in relation to the potential future use of the US gas assets post 2050 and disclosure of the gas asset lives as a key estimate (note 1F to the financial statements), with sensitivity analysis (note 13 to the financial statements), was appropriate.

5.2 Impact of climate change on property, plant and equipment continued

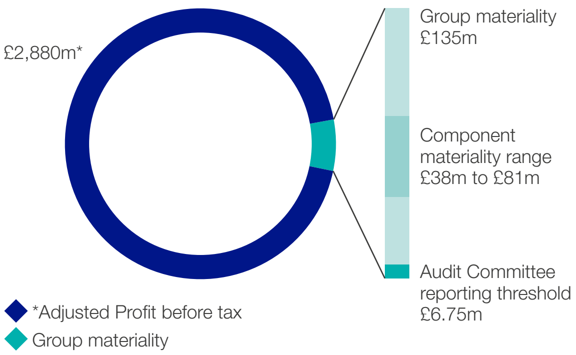
How the scope of our audit responded to the key audit matter	We tested management's internal control over the accounting for and disclosure of the potential impacts associated with the energy transition and climate change. With the assistance of our sustainability specialists, we challenged management's judgement that it is probable the useful lives of the US gas assets will extend beyond 2050 in light of the different goals, commitments and legislation relating to net zero in the US states in which the Group operates by: • understanding potential strategic pathways to achieve net zero targets; • obtaining and reading government plans in the US for achieving net zero which we compared to the potential strategic pathways; • challenging the technical feasibility of management's plans by considering the readiness for hydrogen blending with other gases across both transmission and distribution networks; • evaluating information from the Group's regulators, including rate cases in the US, to consider whether they presented any contradictory evidence; • performing an assessment of the likelihood of occurrence of alternative scenarios for achieving net zero targets; • considering the potential for repurposing the Group's gas networks for alternative uses, and in particular management's plans to decarbonise the natural gas system with renewable natural gas and hydrogen; and • reading a number of external reports, the key ones being: – The Sixth Carbon Budget, produced by the Climate Change Committee; – National Grid's 'Clean Energy Vision' report; – The 'DPU 20-80 Notice of Filing and Public Hearing'; – 'Ramping Up Heat Pump Adoption in New York State'; – 'E3's Technical Analysis of Decarbonization Pathways report' for Massachusetts; – The 'Pathways to Carbon-Neutral NYC: Modernize, Reimagine, Reach', produced by the New York City Mayor's Office of Sustainability; and searching for contradictory evidence in respect of management's judgements. We also held discussions with Deloitte specialists in other countries regarding the suitability of existing gas infrastructure for transporting hydrogen across both transmission and distribution gas assets as well as the potential cost effectiveness of green hydrogen. We assessed the disclosures set out in note 1 to the financial statements and the sensitivity analysis set out in note 13 to the financial statements regarding the useful economic lives of the Group's gas assets.
Key observations	Our testing confirmed that the relevant controls over management's assessment of the impact of the energy transition and climate change operated effectively. In the UK we have noted that the announcement of the 60% sale of its UK gas business, 'NGG', in March 2022 has resulted in a reduced risk and that the depreciation impact on the current year financial statements is not material as depreciation of the gas assets ceased from the date the business was held for sale in August 2021. We observe that whilst some indicators do exist suggesting that the useful economic lives of the Group's US gas assets may be limited to 2050, these are mitigated by other statements by governments and advisory bodies which suggest electrification alone is not a reliable solution and therefore gas distribution assets in the US, will continue to have a role beyond 2050. Management's best estimate of the useful economic lives of US gas assets, across all states in which it operates, is based on the depreciable lives identified through depreciation studies for each asset which are approved by the respective state regulator. Accordingly, in the US, the IFRS asset depreciable lives are identical to those agreed by the Group's regulators for regulatory purposes. We note that whilst state energy policy in the US states in which the Group operates is codified by the legislature, it is the regulators who are charged with implementing state energy policies. We concluded it was reasonable to assume that there will be a valuable use for the Group's US gas assets beyond 2050 and in the absence of any determination by the Group's regulators, it continues to be reasonable to use the regulatory asset lives for the calculation of depreciation in accordance with IFRS. We consider the disclosures in note 1 to the financial statements and the sensitivity analysis in note 13 to the financial statements to be appropriate. We are satisfied that management's other disclosures in the Annual Report and Accounts relating to the uncertainty surrounding the future use of the Group's gas assets are consistent with the financial statements and our understanding of the business.

6. Our application of materiality

6.1 Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent Company financial statements
Materiality	£135 million (2021: £120 million)	£135 million (2021: £100 million)
Basis for determining materiality	Our determined materiality represents 4.7% (2021: 5.9%) of adjusted profit before tax from continuing operations and 3.9% (2021: 5.8%) of statutory profit before tax from continuing operations. Adjusted profit before tax is profit before tax, exceptional items and remeasurements as disclosed in the consolidated income statement. Prior year materiality was determined on a similar basis.	We determined materiality for our audit of the Parent Company financial statements using 0.83% of net assets (2021: 0.68%). The increase in materiality is in part a result of net assets increasing in the current year. In addition, we decided to align the Parent Company materiality with Group materiality.
Rationale for the benchmark applied	We consider adjusted profit before tax to be an important benchmark of the performance of the Group. We consider it appropriate to adjust for exceptional items and remeasurements as these items are volatile and not reflective of the underlying performance of the Group. We conducted an assessment of which line items we understand to be the most important to investors and analysts by reviewing analyst reports and National Grid's communications to shareholders and lenders, as well as the communications of peer companies. This assessment resulted in us considering the financial statement line items above. Profit before tax is the benchmark ordinarily considered by us when auditing listed entities. It provides comparability against other companies across all sectors, but has limitations when auditing companies whose earnings are impacted by items which can be volatile from one period to the next, and therefore may not be representative of the volume of transactions and the overall size of the business in a given year, or where the impact of volatility may result in the recognition of material income or charges in a particular year. Whilst not an IFRS measure, adjusted profit is one of the key metrics communicated by management in National Grid's results announcements. It excludes some of the volatility arising from changes in fair values of financial assets and liabilities as well as exceptional items. It was also the key measure applied in the prior year. 	As the Company is non-trading, operates primarily as a holding company for the Group's trading entities, and is not profit orientated, we believe the net asset position is the most appropriate benchmark to use.

6.2 Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole.

	Group financial statements	Parent Company financial statements
Performance materiality	70% (2021: 80%) of Group materiality. Given the acquisitions, disposals and changes in operating model and key financial systems, we have set this at 70% of materiality compared with 80% in the prior year.	70% (2021: 80%) of Parent Company materiality. Although the factors leading to the reduction in performance materiality % for the Group do not impact the Parent Company in the same way, we also decided to align performance materiality with the Group.
Basis and rationale for determining performance materiality	In determining performance materiality, we considered the following factors: • Our cumulative experience from prior year audits; • The level of corrected and uncorrected misstatements identified; • Our risk assessment, including our understanding of the entity and its environment; • Our assessment of the Group's overall control environment. We also considered the level of change in the business from the prior year.	

6.3 Error reporting threshold

We agreed with the Audit & Risk Committee that we would report to the Committee all audit differences in excess of £6.75 million (2021: £6 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit & Risk Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

7.1 Identification and scoping of components

Our audit was scoped by obtaining an understanding of the Group and its environment and assessing the risks of material misstatements at the Group level. We used data analytics tools and specialists to help inform our understanding of the business, identify key risk areas and evaluate the level of audit coverage required.

The UK Electricity Transmission, UK Gas Transmission, UK Electricity System Operator, UK Electricity Distribution and US regulated (comprising the New York and New England business units) components were subject to a full-scope audit for Group reporting purposes, completed to the individual component materiality levels set out below.

In addition to the above components subject to full scope audit procedures by the component teams, we have identified three other business units which form part of National Grid Ventures and Other, where we consider there to be a reasonable possibility of material misstatement in specific items within the financial statements: National Grid Ventures UK, Genco and UK Property. Accordingly, we have directed component auditors to perform specific audit procedures in relation to material account balances and analytical procedures on the respective income statements and statements of financial position for these components.

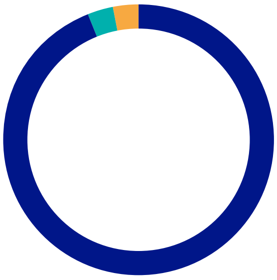
Business unit	Audit scope	Component materiality
UK Electricity Transmission	Full-scope audit	£48 million
UK Gas Transmission	Full-scope audit	£43 million
UK Electricity System Operator	Full-scope audit	£48 million
UK Electricity Distribution	Full-scope audit	£48 million
US regulated (comprising New York and New England)	Full-scope audit	£81 million
National Grid Ventures UK	Audit of specified account balances	£26 million
Genco (comprising US generating assets)	Audit of specified account balances	£26 million
UK Property	Audit of specified account balances	£26 million

In addition to the work performed at a component level, the Group audit team performed audit procedures on the Parent Company financial statements, including but not limited to corporate activities such as treasury as well as on the consolidated financial statements themselves, including entity-level controls, litigation provisions, the consolidation, financial statement disclosures and risk assessment work on components not included elsewhere in the scope of our audit. The Group audit team also performed analytical reviews on out-of-scope components, led the work in connection with the impact of climate change on the useful lives of the Group's gas assets and co-ordinated certain procedures performed on key areas, such as the WPD purchase price allocation and goodwill impairment and environmental provisions, where audit work is performed by both the Group and component audit teams.

The scope and risk assessment of our audit is broadly consistent with the prior year and our audit coverage of 'Revenue', 'Profit before tax' and 'Net assets' is materially the same as in the prior year.

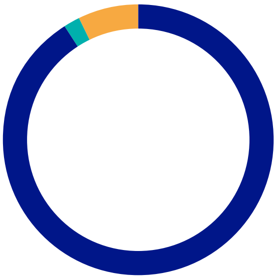
7.1 Identification and scoping of components continued

Revenue



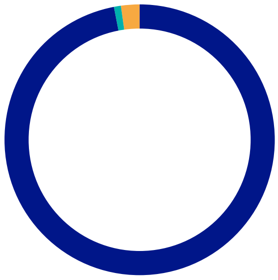
- Full audit scope 94%
- Specified audit procedures 3%
- Review at Group level 3%

Profit before tax



- Full audit scope 91%
- Specified audit procedures 2%
- Review at Group level 7%

Net assets



- Full audit scope 97%
- Specified audit procedures 1%
- Review at Group level 2%

7.2. Our consideration of the control environment

Our audit approach was generally to place reliance on management's relevant controls over all business cycles affecting in-scope financial statement line items. We tested controls through a combination of tests of inquiry, observation, inspection and re-performance.

In limited circumstances where controls were deficient and there were not sufficient mitigating or alternative controls we could rely on, we adopted a non-controls reliance approach. All control deficiencies which we considered to be significant were communicated to the Audit & Risk Committee. All other deficiencies were communicated to management. For all deficiencies identified, we considered the impact and updated our audit plan accordingly.

The Group's financial systems environment relies on a high number of UK and US applications. In the current year, we scoped 44 IT systems as relevant to the audit. These systems are all directly or indirectly relevant to the entity's financial reporting process.

We planned to rely on the General IT Controls (GITCs) associated with these systems, where the GITCs were appropriately designed and implemented, and these were operating effectively. To assess the operating effectiveness of GITCs, our IT audit specialists performed testing on access security, change management, data centre operations and network operations.

7.3. Our consideration of climate-related risks

Climate change impacts National Grid's business in a number of ways as set out in the Strategic Report on page 30 of the Annual Report and note 1 to the financial statements on page 154. It represents a key strategic consideration of management.

We reviewed management's climate change risk assessment and evaluated the completeness of identified risks and the impact on the financial statements. We also considered the impact of climate change in our own risk assessment procedures. Management's assessment included an overview of the legislative changes in the US, key developments post COP26 and an evaluation of the possible future use of National Grid's US gas assets in a net zero carbon energy system. Both management's and our risk assessment identified the useful economic lives of the gas assets in the US, as the key risk as described in note 13 to the financial statements and in the Audit & Risk Committee Report (page 102). Our response to this risk is documented in our Key Audit Matter on pages 139 – 140.

In addition to the procedures in respect of the Key Audit Matter mentioned above, with the involvement of our climate change specialists we:

- read the climate-related statements made by management (as disclosed in 'The Environment' section of the 'Our commitment to being a responsible business' in the Strategic Report) and considered whether these were in line with our understanding of management's approach to climate change and the narrative reporting was in line with financial statements and the knowledge obtained throughout the audit; and
- read the Task Force on Climate-related Financial Disclosures (TCFD) and considered if any of the information disclosed was inconsistent with the information we obtained through our audit.

7.4. Working with other auditors

The Group audit team is responsible for the scope and direction of the audit process and provide direct oversight, review and coordination of our component audit teams.

As each of the financially significant components maintains separate financial records, we have engaged component auditors from the Deloitte member firms in the US or the UK to perform procedures at these components on our behalf. This approach allows us to engage local auditors who have appropriate knowledge of local regulations to perform this audit work. We issued detailed instructions to the component auditors and directed and supervised their work.

We interacted regularly with the component Deloitte teams during each stage of the audit and reviewed key working papers. We maintained continuous and open dialogue with our component teams in addition to holding formal meetings to ensure that we were fully aware of their progress and the results of their procedures.

Our oversight of component auditors focused on the planning of their audit work and key judgements made. In particular, our supervision and direction focused on the work performed in relation to key estimates and judgements made by management. As part of our monitoring of component auditors, we participated in key local audit meetings.

The senior statutory auditor and other Group audit partners conducted visits to meet in person with the component teams responsible for the full-scope locations, which was supplemented by procedures performed remotely throughout the year. Their involvement included attending planning meetings, discussing the audit approach and any issues arising from the component team's work, meetings with local management, and reviewing key audit working papers on higher and significant risk areas to drive a consistent and high quality audit. The level of involvement of the lead audit partner and the Group audit team in the component audits has been extensive and we are satisfied that it has enabled us to conclude that sufficient appropriate audit evidence has been obtained in support of our opinion on the Group financial statements as a whole.

Independent Auditor's Report to the members of National Grid plc continued

8. Other information

The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information contained within the Annual Report.

We have nothing to report in this regard.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

9. Responsibilities of Directors

As explained more fully in the Statement of Directors' responsibilities, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud or non-compliance with laws and regulations

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

11.1 Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud or non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- the Group's own assessment of the risks that irregularities may occur either as a result of fraud or error that was approved by the Audit & Risk Committee on 22 March 2022;
- results of our enquiries of management, internal audit, and the Audit & Risk Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
  - responding to the allegations of fraud and bribery against former National Grid employees in the US business (as set out in the Audit & Risk Committee report on page 101); and
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations; and
- the matters discussed among the engagement team and our specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. The engagement team includes partners and staff who have extensive experience of working with companies in the same sectors as National Grid operates, and this experience was relevant to the discussion about where fraud risks may arise. Fraud specialists also advised the engagement team of fraud schemes that had arisen in similar sectors and industries, and they participated in the initial fraud risk assessment discussions.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override of controls.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act 2006, Listing Rules, pensions legislation, tax legislation, the UK Corporate Governance Code, IFRS as issued by the IASB, United Kingdom adopted international accounting standards, FRS 101, as well as the US Securities Exchange Act 1934 and relevant SEC regulations, and laws and regulations prevailing in each country which we identified a full-scope component.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Group's operating licences and environmental regulations.

11.2. Audit response to risks identified

As a result of performing the above, we did not identify any key audit matters related to the potential risk of fraud or non-compliance with laws and regulations.

Our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- inquiring of management, the Audit & Risk Committee and in-house legal counsel concerning actual and potential litigation and claims;
- obtaining confirmations from external legal counsel concerning open litigation and claims;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with relevant regulatory authorities; and
- reviewing the outcome of the alleged fraud and bribery investigations as well as testing the design of the entity-level controls, particularly in respect of the whistleblowing process.

In addressing the risk of fraud through management override of controls our procedures included:

- making enquiries of individuals involved in the financial reporting process about inappropriate or unusual activity relating to the processing of journal entries and other adjustments;
- using our data analytics tools, we selected and tested journal entries and other adjustments which were either made at the end of a reporting period or which identified activity that exhibited certain characteristics of audit interest;
- assessing whether the judgements made in making accounting estimates are indicative of a potential bias;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- considering whether there were any significant transactions that are outside the normal course of business, or that otherwise appear to be unusual due to their nature, timing or size.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams. We remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Independent Auditor's Report to the members of National Grid plc continued

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the Parent Company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report or the Directors' Report.

13. Corporate Governance Statement

The Listing Rules require us to review the Directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- the Directors' statement with regard to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 153;
- the Directors' explanation as to its assessment of the Group's prospects, the period this assessment covers and why the period is appropriate set out on pages 33 – 35;
- the Directors' statement on fair, balanced and understandable set out on pages 101 and 134;
- the Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on pages 28 – 32 and 94;
- the section of the Annual Report that describes the review of effectiveness of risk management and internal control systems set out on pages 28 – 32; and
- the section describing the work of the Audit & Risk Committee set out on pages 101 – 105.

14. Matters on which we are required to report by exception

14.1 Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14.2 Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of Directors' remuneration have not been made or the part of the Directors' Remuneration Report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. Other matters which we are required to address

15.1 Auditor tenure

We became independent and commenced our audit transition on 1 January 2017. Following the recommendation of the Audit & Risk Committee, we were appointed by the shareholders at the Annual General Meeting on 31 July 2017 to audit the financial statements for the year ending 31 March 2018 and subsequent financial periods.

The period of total uninterrupted engagement including previous renewals and reappointments of the firm is five years, covering the years ending 31 March 2018 to 31 March 2022.

15.2 Consistency of the audit report with the additional report to the Audit & Risk Committee

Our audit opinion is consistent with the additional report to the Audit & Risk Committee we are required to provide in accordance with ISAs (UK).

16. Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

As required by the Financial Conduct Authority (FCA) Disclosure Guidance and Transparency Rule (DTR) 4.1.14R, these financial statements form part of the European Single Electronic Format (ESEF) prepared Annual Financial Report filed on the National Storage Mechanism of the UK FCA in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditor's report provides no assurance over whether the annual financial report has been prepared using the single electronic format specified in the ESEF RTS.

Douglas King FCA (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
London, United Kingdom
18 May 2022

Consolidated income statement
for the years ended 31 March

2022	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3,5	**18,260**	**189**	**18,449**
Provision for bad and doubtful debts	4	**(167)**	**—**	**(167)**
Other operating income/(costs)	4,5	**(14,280)**	**369**	**(13,911)**
Operating profit	2(b)	**3,813**	**558**	**4,371**
Finance income	5,6	**65**	**(15)**	**50**
Finance costs	5,6	**(1,146)**	**74**	**(1,072)**
Share of post-tax results of joint ventures and associates	5,16	**148**	**(56)**	**92**
Profit before tax	2(b),5	**2,880**	**561**	**3,441**
Tax	5,7	**(669)**	**(589)**	**(1,258)**
Profit after tax from continuing operations		**2,211**	**(28)**	**2,183**
Profit after tax from discontinued operations	10	**344**	**(173)**	**171**
Total profit for the year (continuing and discontinued)		**2,555**	**(201)**	**2,354**
Attributable to:				
Equity shareholders of the parent		**2,554**	**(201)**	**2,353**
Non-controlling interests from continuing operations		**1**	**—**	**1**
Earnings per share (pence)				
Basic earnings per share (continuing)	8			**60.6**
Diluted earnings per share (continuing)	8			**60.3**
Basic earnings per share (continuing and discontinued)	8			**65.4**
Diluted earnings per share (continuing and discontinued)	8			**65.0**

2021[1]	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	13,665	—	13,665
Provision for bad and doubtful debts	4	(325)	—	(325)
Other operating income/(costs)	4,5	(10,913)	(26)	(10,939)
Operating profit	2(b)	2,427	(26)	2,401
Finance income	5,6	35	23	58
Finance costs	5,6	(900)	47	(853)
Share of post-tax results of joint ventures and associates	5,16	66	(8)	58
Profit before tax	2(b),5	1,628	36	1,664
Tax	5,7	(334)	(26)	(360)
Profit after tax from continuing operations		1,294	10	1,304
Profit after tax from discontinued operations	10	340	(3)	337
Total profit for the year (continuing and discontinued)		1,634	7	1,641
Attributable to:				
Equity shareholders of the parent		1,633	7	1,640
Non-controlling interests from continuing operations		1	—	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			37.0
Diluted earnings per share (continuing)	8			36.8
Basic earnings per share (continuing and discontinued)	8			46.6
Diluted earnings per share (continuing and discontinued)	8			46.3

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Consolidated income statement
for the years ended 31 March continued

2020[1]	Notes	Before exceptional items and remeasurements £m	Exceptional items and remeasurements (note 5) £m	Total £m
Continuing operations				
Revenue	2(a),3	13,360	—	13,360
Provision for bad and doubtful debts	4	(234)	—	(234)
Other operating income/(costs)	4,5	(10,322)	(525)	(10,847)
Operating profit	2(b)	2,804	(525)	2,279
Finance income	5,6	70	(16)	54
Finance costs	5,6	(999)	(21)	(1,020)
Share of post-tax results of joint ventures and associates	5,16	88	(1)	87
Profit before tax	2(b),5	1,963	(563)	1,400
Tax	5,7	(362)	(8)	(370)
Profit after tax from continuing operations		1,601	(571)	1,030
Profit after tax from discontinued operations	10	317	(82)	235
Total profit for the year (continuing and discontinued)		1,918	(653)	1,265
Attributable to:				
Equity shareholders of the parent		1,917	(653)	1,264
Non-controlling interests from continuing operations		1	—	1
Earnings per share (pence)				
Basic earnings per share (continuing)	8			29.7
Diluted earnings per share (continuing)	8			29.6
Basic earnings per share (continuing and discontinued)	8			36.5
Diluted earnings per share (continuing and discontinued)	8			36.3

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Consolidated statement of comprehensive income

for the years ended 31 March

	Notes	2022 £m	2021[1] £m	2020[1] £m
Profit after tax from continuing operations		**2,183**	1,304	1,030
Profit after tax from discontinued operations		**171**	337	235
Other comprehensive income from continuing operations				
Items from continuing operations that will never be reclassified to profit or loss:				
Remeasurement gains/(losses) on pension assets and post-retirement benefit obligations	25	**2,172**	1,658	(782)
Net gains/(losses) on equity instruments designated at fair value through other comprehensive income		**12**	46	(9)
Net losses in respect of cash flow hedging of capital expenditure		**(1)**	(12)	(17)
Tax on items that will never be reclassified to profit or loss	7	**(496)**	(472)	232
Total items from continuing operations that will never be reclassified to profit or loss		**1,687**	1,220	(576)
Items from continuing operations that may be reclassified subsequently to profit or loss:				
Retranslation of net assets offset by net investment hedge		**630**	(1,347)	561
Net (losses)/gains in respect of cash flow hedges		**(57)**	67	(121)
Net gains/(losses) in respect of cost of hedging		**1**	20	(80)
Net (losses)/gains on investment in debt instruments measured at fair value through other comprehensive income		**(11)**	80	(15)
Share of other comprehensive income/(losses) of associates, net of tax		**1**	1	(5)
Tax on items that may be reclassified subsequently to profit or loss	7	**15**	(8)	33
Total items from continuing operations that may be reclassified subsequently to profit or loss		**579**	(1,187)	373
Other comprehensive income/(loss) for the year, net of tax from continuing operations		**2,266**	33	(203)
Other comprehensive income/(loss) for the year, net of tax from discontinued operations	10	**211**	(216)	38
Other comprehensive income/(loss) for the year, net of tax		**2,477**	(183)	(165)
Total comprehensive income for the year from continuing operations		**4,449**	1,337	827
Total comprehensive income for the year from discontinued operations	10	**382**	121	273
Total comprehensive income for the year		**4,831**	1,458	1,100
Attributable to:				
Equity shareholders of the parent				
From continuing operations		**4,447**	1,338	825
From discontinued operations		**382**	121	273
		4,829	1,459	1,098
Non-controlling interests				
From continuing operations		**2**	(1)	2

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Consolidated statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Retained earnings £m	Other equity reserves[1] £m	Total shareholders' equity £m	Non-controlling interests £m	Total equity £m
At 31 March 2019	458	1,314	21,999	(4,223)	19,548	20	19,568
Profit for the year	—	—	1,264	—	1,264	1	1,265
Other comprehensive (loss)/income for the year	—	—	(509)	343	(166)	1	(165)
Total comprehensive income for the year	—	—	755	343	1,098	2	1,100
Equity dividends	—	—	(892)	—	(892)	—	(892)
Scrip dividend-related share issue[2]	12	(13)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(6)	—	(6)	—	(6)
Share-based payments	—	—	19	—	19	—	19
Tax on share-based payments	—	—	3	—	3	—	3
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(15)	(15)	—	(15)
At 1 April 2020	470	1,301	21,895	(3,895)	19,771	22	19,793
Profit for the year	—	—	1,640	—	1,640	1	1,641
Other comprehensive income/(loss) for the year	—	—	1,001	(1,182)	(181)	(2)	(183)
Total comprehensive income/(loss) for the year	—	—	2,641	(1,182)	1,459	(1)	1,458
Equity dividends	—	—	(1,413)	—	(1,413)	—	(1,413)
Scrip dividend-related share issue[2]	4	(5)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Purchase of own shares	—	—	(2)	—	(2)	—	(2)
Share-based payments	—	—	27	—	27	—	27
Tax on share-based payments	—	—	(2)	—	(2)	—	(2)
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	(17)	(17)	—	(17)
At 1 April 2021	474	1,296	23,163	(5,094)	19,839	21	19,860
Profit for the year	—	—	2,353	—	2,353	1	2,354
Other comprehensive income for the year	—	—	1,871	605	2,476	1	2,477
Total comprehensive income for the year	—	—	4,224	605	4,829	2	4,831
Equity dividends	—	—	(922)	—	(922)	—	(922)
Scrip dividend-related share issue[2]	11	(12)	—	—	(1)	—	(1)
Issue of treasury shares	—	—	17	—	17	—	17
Transactions in own shares	—	16	(3)	—	13	—	13
Share-based payments	—	—	43	—	43	—	43
Tax on share-based payments	—	—	7	—	7	—	7
Transfer of accumulated gains and losses on sale of equity investments[3]	—	—	82	(82)	—	—	—
Cash flow hedges transferred to the statement of financial position, net of tax	—	—	—	8	8	—	8
At 31 March 2022	**485**	**1,300**	**26,611**	**(4,563)**	**23,833**	**23**	**23,856**

1. For further details of other equity reserves, see note 28.
2. Included within the share premium account are costs associated with scrip dividends.
3. In the year ended 31 March 2022, the Group disposed of its equity instruments related to shares held as part of a portfolio of financial instruments which back some long-term employee liabilities. The equity instruments were previously measured at FVOCI and prior to the disposal the Group recognised a gain of £12 million in the year. The accumulated gain and losses of £82 million recognised in other comprehensive income were transferred to retained earnings on disposal (see note 15).

Consolidated statement of financial position
as at 31 March

	Notes	2022 £m	2021 £m
Non-current assets			
Goodwill	11	**9,532**	4,588
Other intangible assets	12	**3,272**	1,443
Property, plant and equipment	13	**57,532**	47,043
Other non-current assets	14	**303**	293
Pension assets	25	**3,885**	1,747
Financial and other investments	15	**830**	755
Investments in joint ventures and associates	16	**1,238**	867
Derivative financial assets	17	**305**	542
Total non-current assets		**76,897**	57,278
Current assets			
Inventories and current intangible assets	18	**511**	439
Trade and other receivables	19	**3,715**	2,919
Current tax assets		**106**	67
Financial and other investments	15	**3,145**	2,342
Derivative financial assets	17	**282**	457
Cash and cash equivalents	20	**204**	157
Assets held for sale	10	**10,000**	3,557
Total current assets		**17,963**	9,938
Total assets		**94,860**	67,216
Current liabilities			
Borrowings	21	**(12,121)**	(3,737)
Derivative financial liabilities	17	**(144)**	(145)
Trade and other payables	22	**(4,915)**	(3,517)
Contract liabilities	23	**(130)**	(66)
Current tax liabilities		**(32)**	(75)
Provisions	26	**(240)**	(260)
Liabilities held for sale	10	**(7,188)**	(1,568)
Total current liabilities		**(24,770)**	(9,368)
Non-current liabilities			
Borrowings	21	**(33,344)**	(27,483)
Derivative financial liabilities	17	**(869)**	(754)
Other non-current liabilities	24	**(805)**	(843)
Contract liabilities	23	**(1,342)**	(1,094)
Deferred tax liabilities	7	**(6,765)**	(4,815)
Pensions and other post-retirement benefit obligations	25	**(810)**	(1,032)
Provisions	26	**(2,299)**	(1,967)
Total non-current liabilities		**(46,234)**	(37,988)
Total liabilities		**(71,004)**	(47,356)
Net assets		**23,856**	19,860
Equity			
Share capital	27	**485**	474
Share premium account		**1,300**	1,296
Retained earnings		**26,611**	23,163
Other equity reserves	28	**(4,563)**	(5,094)
Total shareholders' equity		**23,833**	19,839
Non-controlling interests		**23**	21
Total equity		**23,856**	19,860

The consolidated financial statements set out on pages 147 – 234 were approved by the Board of Directors on 18 May 2022 and were signed on its behalf by:

Paula Rosput Reynolds Chair
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Consolidated cash flow statement
for the years ended 31 March

	Notes	2022 £m	2021[1] £m	2020[1] £m
Cash flows from operating activities				
Total operating profit from continuing operations	2(b)	**4,371**	2,401	2,279
Adjustments for:				
Exceptional items and remeasurements	5	**(558)**	26	525
Other fair value movements		**(65)**	(22)	—
Depreciation, amortisation and impairment		**1,830**	1,485	1,435
Share-based payments		**38**	23	16
Changes in working capital		**361**	279	217
Changes in provisions		**140**	(167)	(138)
Changes in pensions and other post-retirement benefit obligations		**(76)**	(16)	(58)
Cash flows relating to exceptional items		**(253)**	(42)	(36)
Cash generated from operations – continuing operations		**5,788**	3,967	4,240
Tax paid		**(298)**	(91)	(92)
Net cash inflow from operating activities – continuing operations		**5,490**	3,876	4,148
Net cash inflow from operating activities – discontinued operations		**782**	585	470
Cash flows from investing activities				
Acquisition of financial investments		**(197)**	(99)	(108)
Acquisition of, and contributions to National Grid Renewables and Emerald Energy Venture LLC		**(16)**	(26)	(139)
Acquisition of WPD[2]	37	**(7,837)**	—	—
Investments in joint ventures and associates		**(265)**	(81)	(82)
Disposal of financial investments		**215**	66	63
Disposal of interests in Quadgas HoldCo Limited	10	**—**	—	1,965
Disposal of interest in St William Homes LLP	16	**413**	—	—
Purchases of intangible assets		**(446)**	(399)	(295)
Purchases of property, plant and equipment		**(5,098)**	(4,209)	(4,291)
Disposals of property, plant and equipment		**26**	7	66
Dividends received from joint ventures, associates and other investments		**166**	80	75
Interest received		**40**	16	73
Net movements in short-term financial investments		**(781)**	(438)	12
Cash inflows on derivatives		**17**	225	58
Cash outflows on derivatives		**(122)**	(81)	(281)
Net cash flow used in investing activities – continuing operations		**(13,885)**	(4,939)	(2,884)
Net cash flow used in investing activities – discontinued operations		**(125)**	(177)	(311)
Cash flows from financing activities				
Proceeds from issue of treasury shares		**33**	16	16
Purchase of own shares		**(3)**	(2)	(6)
Proceeds received from loans	29(c)	**12,347**	5,150	3,921
Repayment of loans	29(c)	**(1,261)**	(1,654)	(3,037)
Payments of lease liabilities	29(c)	**(117)**	(107)	(115)
Net movements in short-term borrowings	29(c)	**(11)**	(619)	(562)
Cash inflows on derivatives	29(c)	**20**	17	46
Cash outflows on derivatives	29(c)	**(114)**	(183)	(245)
Interest paid	29(c)	**(1,053)**	(753)	(867)
Dividends paid to shareholders	9	**(922)**	(1,413)	(892)
Net cash flow from/(used in) financing activities – continuing operations		**8,919**	452	(1,741)
Net cash flow (used in)/from financing activities – discontinued operations		**(1,150)**	298	135
Net increase/(decrease) in cash and cash equivalents	29(b)	**31**	95	(183)
Reclassification to held for sale	10,29(b)	**(11)**	(4)	—
Exchange movements	29(b)	**5**	(7)	4
Cash and cash equivalents at start of year		**157**	73	252
Cash and cash equivalents at end of year[3]	20	**182**	157	73

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Balance consists of cash consideration paid and cash acquired from WPD.
3. Cash and cash equivalents at end of year are shown net of the Group's bank overdraft as at 31 March 2022 of £22 million (2021: £nil; 2020: £nil).

Notes to the consolidated financial statements

1. Basis of preparation and recent accounting developments

Accounting policies describe our approach to recognising and measuring transactions and balances in the year. The accounting policies applicable across the financial statements are shown below, whereas accounting policies that are specific to a component of the financial statements have been incorporated into the relevant note.

This section also shows areas of judgement and key sources of estimation uncertainty in these financial statements. In addition, we have summarised new International Accounting Standards Board (IASB) and UK endorsed accounting standards, amendments and interpretations and whether these are effective for this year end or in later years, explaining how significant changes are expected to affect our reported results.

National Grid's principal activities involve the transmission and distribution of electricity in Great Britain and electricity and gas in northeastern US. The Company is a public limited liability company incorporated and domiciled in England and Wales, with its registered office at 1–3 Strand, London WC2N 5EH.

The Company, National Grid plc, which is the ultimate parent of the Group, has its primary listing on the London Stock Exchange and is also quoted on the New York Stock Exchange.

These consolidated financial statements were approved for issue by the Board on 18 May 2022.

These consolidated financial statements have been prepared in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) and related interpretations as issued by the IASB and IFRS as adopted by the UK. They are prepared on the basis of all IFRS accounting standards and interpretations that are mandatory for the period ended 31 March 2022 and in accordance with the Companies Act 2006. The comparative financial information has also been prepared on this basis.

The consolidated financial statements have been prepared on a historical cost basis, except for the recording of pension assets and liabilities, the revaluation of derivative financial instruments and certain commodity contracts and certain financial assets and liabilities measured at fair value.

These consolidated financial statements are presented in pounds sterling, which is also the functional currency of the Company.

The notes to the financial statements have been prepared on a continuing basis unless otherwise stated.

Our income statement and segmental analysis separately identify financial results before and after exceptional items and remeasurements. We continue to use a columnar presentation as we consider it improves the clarity of the presentation, is consistent with the way that financial performance is measured by management and reported to the Board and the Executive Committee, and assists users of the financial statements to understand the results. The inclusion of total profit for the period from continuing operations before exceptional items and remeasurements is used to derive part of the incentive target set annually for remunerating certain Executive Directors and accordingly we believe it is important for users of the financial statements to understand how this compares with our results on a statutory basis and period on period.

A. Going concern

As part of the Directors' consideration of the appropriateness of adopting the going concern basis of accounting in preparing these financial statements, the Directors have considered the impact of the planned disposals of The Narragansett Electric Company (NECO) and the UK Gas Transmission business (see note 10) and the financing for the acquisition of PPL Western Power Distribution (WPD) (see note 33). The Directors have assessed the principal risks discussed on pages 28 – 32, including by modelling both a base case and a reasonable worst-case scenario.

The main cash flow impacts identified in the reasonable worst-case scenario are:

- additional potential working capital requirements in response to energy price increases driven by the wider energy market stability challenges and the conflict between Russia and Ukraine;
- adverse impacts of inflation on our capex programme;
- adverse impact from timing across the Group, i.e. a net under-recovery of allowed revenues or reductions in over-collections;
- a significant reduction in cash collections driven by lower customer demand and increased bad debt in our US businesses and potential supplier defaults in our UK business;
- higher cash outflow than expected following the Sellindge Interconnector fire;
- higher operating costs than expected; or non-delivery of planned efficiencies across the Group; and
- the potential impact of further significant storm costs in the US.

As part of their analysis, the Board also considered the following potential levers at their discretion to improve the position identified by the analysis if the debt capital markets are not accessible:

- the payment of dividends to shareholders;
- significant changes in the phasing of the Group's capital programme, with elements of non-essential works and programmes delayed; and
- a number of further reductions in operating expenditure across the Group primarily related to workforce cost reductions in both the UK and the US.

Having considered the reasonable worst-case scenario, the impact and timing of the planned strategic transactions, and the further levers at the Board's discretion, the Group continues to have headroom against the Group's committed facilities identified in note 33 to the financial statements.

In addition to the above, the ability to raise new and extend existing financing was separately included in the analysis, and the Directors noted the c.£4.2 billion of new long-term senior debt issued in the period from 1 April to 31 March 2022 as evidence of the Group's ability to continue to have access to the debt capital markets if needed.

Based on the above, the Directors have concluded the Group is well placed to manage its financing and other business risks satisfactorily and have a reasonable expectation that the Group will have adequate resources to continue in operation for at least 12 months from the signing date of these consolidated financial statements. They therefore consider it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Notes to the consolidated financial statements continued

1. Basis of preparation and recent accounting developments continued

B. Basis of consolidation
The consolidated financial statements incorporate the results, assets and liabilities of the Company and its subsidiaries, together with a share of the results, assets and liabilities of joint operations.

A subsidiary is defined as an entity controlled by the Group. Control is achieved where the Group is exposed to, or has the rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The Group accounts for joint ventures and associates using the equity method of accounting, where the investment is carried at cost plus post-acquisition changes in the share of net assets of the joint venture or associate, less any provision for impairment. Losses in excess of the consolidated interest in joint ventures and associates are not recognised, except where the Company or its subsidiaries have made a commitment to make good those losses.

Where necessary, adjustments are made to bring the accounting policies used in the individual financial statements of the Company, subsidiaries, joint operations, joint ventures and associates into line with those used by the Group in its consolidated financial statements under IFRS. Intercompany transactions are eliminated.

The results of subsidiaries, joint operations, joint ventures and associates acquired or disposed of during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Acquisitions are accounted for using the acquisition method, where the purchase price is allocated to the identifiable assets acquired and liabilities assumed on a fair value basis and the remainder recognised as goodwill.

C. Foreign currencies
Transactions in currencies other than the functional currency of the Company or subsidiary concerned are recorded at the rates of exchange prevailing on the dates of the transactions. At each reporting date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Non-monetary assets are not retranslated unless they are carried at fair value.

Gains and losses arising on the retranslation of monetary assets and liabilities are included in the income statement, except where the application of hedge accounting requires inclusion in other comprehensive income (see note 32(e)).

On consolidation, the assets and liabilities of operations that have a functional currency different from the Company's functional currency of pounds sterling, principally our US operations that have a functional currency of US dollars, are translated at exchange rates prevailing at the reporting date. Income and expense items are translated at the average exchange rates for the period where these do not differ materially from rates at the date of the transaction. Exchange differences arising are recognised in other comprehensive income and transferred to the consolidated translation reserve within other equity reserves (see note 28).

D. Disposal of The Narragansett Electric Company
As described further in note 10, on 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, NECO. Whilst all of the regulatory approvals are in place, the disposal of NECO was not finalised as at 31 March 2022 due to the appeal of one of these approvals by the Rhode Island Attorney General.

The associated assets and liabilities have been presented as held for sale in the consolidated statement of financial position. As NECO does not represent either a major line of business or a geographical area of operations, it has not met the criteria for classification as a discontinued operation and therefore its results for the period are not separately disclosed on the face of the income statement.

E. Disposal of UK Gas Transmission
As described further in note 10, on 27 March 2022, the Group agreed to sell 100% of the UK Gas Transmission business to a new entity (the 'Acquiring Entity') in exchange for £4.2 billion cash consideration (subject to customary completion adjustments) and a 40% interest in the Acquiring Entity. The sale is expected to complete in the third quarter of the financial year ending 31 March 2023 subject to the receipt of all regulatory approvals. The Group's 40% interest in the Acquiring Entity is expected to be classified as an associate on the basis that the Group will retain significant influence over the business through its retained stake. The Group has the ability to appoint two out of the seven Directors to the Board of the Acquiring Entity. On 27 March 2022, the Group also entered into a Further Acquisition Agreement (FAA) for the potential sale of the remaining 40% stake. The FAA is a put option that can be exercised by the purchaser either in the period between 1 January and 31 March 2023 or in the period between 1 April and 30 June 2023. The deferral of the option window is at our discretion (subject to change depending on the timing of the closing of the sale agreement).

The Group classified the business as held for sale at the end of August 2021, when it became highly probable that the value of the business to the Group would be recovered through sale rather than continued ownership. As UK Gas Transmission represents a major separate line of business, the business has been classified separately as a discontinued operation for all periods presented in the consolidated income statement and statement of comprehensive income. Earnings per share (EPS) has also been shown split between continuing and discontinued operations.

F. Areas of judgement and key sources of estimation uncertainty
The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates. Information about such judgements and estimations is in the notes to the financial statements, and the key areas are summarised below.

Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are as follows:
- categorisation of certain items as exceptional items or remeasurements and the definition of adjusted earnings (see notes 5 and 8). In applying the Group's exceptional items framework, we have considered a number of key matters, as detailed in note 5;
- in relation to the planned disposal of the UK Gas Transmission business, the key judgement that has been applied is the date from which the business qualified for classification as held for sale and a discontinued operation, as explained further in note 10;
- in performing the WPD goodwill and indefinite-lived licence intangible assets impairment assessment, judgement has been applied over the forecast cash flow duration (see note 11); and
- the judgement that, notwithstanding legislation enacted and targets committing the UK, New York State and Massachusetts to achieving net zero greenhouse gas emissions by 2050, these do not trigger a reassessment of the remaining useful economic lives of our gas network assets (see key sources of estimation uncertainty below and note 13).

Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are as follows:
- in performing the goodwill impairment assessment of the WPD group of cash-generating units, the key source of estimation uncertainty relates to the discount rate and terminal value assumptions used in the value-in-use calculations (see note 11);
- the valuation of liabilities for pensions and other post-retirement benefits (see note 25); and
- the cash flows applied in determining the environmental provisions, in particular relating to three US Superfund sites (see note 26).

1. Basis of preparation and recent accounting developments continued

In addition, we also highlight the estimates made regarding the useful economic lives of our gas network assets due to the length over which they are being depreciated, the potential for new and evolving technologies over that period, and the range of potential pathways for meeting net zero targets (see note 13 for details and sensitivity analysis).

In order to illustrate the impact that changes in assumptions for the valuation of pension assets and liabilities and cash flows for environmental provisions could have on our results and financial position, we have included sensitivity analyses in note 35. In performing our impairment assessment of goodwill and indefinite-lived licence intangible assets, we have sensitised our forecasts to factor in adjustments to key inputs to each model (see note 11). Information on what we believe to be a reasonably possible range of outcomes on the recoverability of customer receivables is included in note 19.

G. Accounting policy choices

IFRS provides certain options available within accounting standards. Choices we have made, and continue to make, include the following:

- Presentational formats: we use the nature of expense method for our income statement and aggregate our statement of financial position to net assets and total equity. In the income statement, we present subtotals of total operating profit, profit before tax and profit after tax from continuing operations, together with additional subtotals excluding exceptional items and remeasurements as a result of the three columnar presentation described earlier. Exceptional items and remeasurements are presented in a separate column on the face of the income statement.
- Financial instruments: we normally opt to apply hedge accounting in most circumstances where this is permitted (see note 32(e)).

H. New IFRS accounting standards and interpretations effective for the year ended 31 March 2022

With effect from the period commencing 1 April 2021, the consolidated financial statements are prepared in accordance with IAS and IFRS and related interpretations as adopted by the UK, instead of those adopted by the EU. As both sets of accounting standards are currently aligned, there will be no transitional adjustments required and comparative amounts were not required to be restated.

The Group early adopted the following amendments to standards which have had no material impact on the Group's results or financial statement disclosures:

- amendments to IFRS 16 'Leases – COVID-19-Related Rent Concessions';
- amendments to IFRS 3 'Definition of a Business'; and
- amendments to IAS 1 and IAS 8 'Definition of Material'.

In April 2021, the IFRS IC (Interpretation Committee) also issued an agenda decision in relation to the accounting treatment for configuration and customisation costs in a cloud computing arrangement. This guidance clarified that in order for an intangible asset to be capitalised in relation to customisation and configuration costs in a cloud computing arrangement, it is necessary for there to be control of the underlying software asset or for there to be a separate intangible asset which meets the definition in IAS 38 Intangible Assets. As at 31 March 2022, the Group has recognised a cumulative adjustment against software intangible assets of £34 million for previously capitalised customisation and configuration relating to its continuing operations. The Group has also considered the application of the new accounting guidance for its comparative periods and concluded that it does not have a material impact. Accordingly, no comparative periods have been restated.

I. New IFRS accounting standards and interpretations not yet adopted

The following new accounting standards and amendments to existing standards have been issued but are not yet effective or have not yet been endorsed by the UK:

- IFRS 17 'Insurance Contracts';
- amendments to IFRS 3 'Business Combinations';
- amendments to IAS 12 'Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction';
- amendments to IAS 16 'Property, Plant and Equipment';
- amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets';
- amendments to IAS 1 'Presentation of Financial Statements';
- amendments to IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors';
- annual improvements to IFRS standards 2018-2020; and
- amendments to IFRS Practice Statement 2 – making materiality judgements.

Effective dates will be subject to the UK endorsement process.

The Group is currently assessing the impact of the above standards, but they are not expected to have a material impact.

The Group has not adopted any other standard, amendment or interpretation that has been issued but is not yet effective.

2. Segmental analysis

This note sets out the financial performance for the year split into the different parts of the business (operating segments). The performance of these operating segments is monitored and managed on a day-to-day basis. Revenue and the results of the business are analysed by operating segment, based on the information the Board of Directors uses internally for the purposes of evaluating the performance of each operating segment and determining resource allocation between them. The Board is National Grid's chief operating decision maker (as defined by IFRS 8 'Operating Segments') and assesses the profitability of operations principally on the basis of operating profit before exceptional items and remeasurements (see note 5). As a matter of course, the Board also considers profitability by segment, excluding the effect of timing. However, the measure of profit disclosed in this note is operating profit before exceptional items and remeasurements as this is the measure that is most consistent with the IFRS results reported within these financial statements.

As a result of the new operating model, the operating segments that were reported up to the Board have changed during the period to align with the six business units that will continue to operate, and the UK Gas Transmission business that is expected to be disposed of, which is now considered a discontinued operation (see note 10). Five of these continuing businesses meet the size criteria set out in the accounting standards to be treated as reportable operating segments. The other operating segment, remaining businesses that are not operating segments and the corporate centre activities are reported to the Board of Directors on an aggregated basis.

The following table describes the main activities for each reportable operating segment within continuing operations:

UK Electricity Transmission	The high-voltage electricity transmission networks in England and Wales.
UK Electricity Distribution	The electricity distribution networks of WPD in the East Midlands, West Midlands and South West of England and South Wales.
UK Electricity System Operator	The Great Britain system operator.
New England	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New England.
New York	Gas distribution networks, electricity distribution networks and high-voltage electricity transmission networks in New York.

The UK Gas Transmission business, which owns the high-pressure gas transmission networks in Great Britain and gas system operator in Great Britain and includes the regulated gas metering operations (which was previously reported within NGV and Other), is now a discontinued operation and classified as held for sale (see note 10). Therefore, while it is still a reportable operating segment, it is no longer presented within continuing operations.

The National Grid Ventures (NGV) operating segment is outside our regulated core business and operates in competitive markets across the UK and the US. The business comprises all commercial operations in LNG at the Isle of Grain in the UK, our electricity generation business in the US, our electricity interconnectors and our investment in National Grid Renewables Development LLC, with a focus on investment and future activities in emerging growth areas. NGV does not meet the thresholds set out in IFRS 8 to be identified as a separate reportable segment and therefore its results are not required to be separately presented.

Other activities that do not form part of any of the segments in the above table or NGV primarily relate to our UK property business together with insurance and corporate activities in the UK and US and the Group's investments in technology and innovation companies through National Grid Partners.

(a) Revenue

Revenue primarily represents the sales value derived from the generation, transmission and distribution of energy, together with the sales value derived from the provision of other services to customers. Refer to note 3 for further details.

Sales between operating segments are priced considering the regulatory and legal requirements to which the businesses are subject. The analysis of revenue by geographical area is on the basis of destination. There are no material sales between the UK and US geographical areas.

	2022			2021[1]			2020[1]		
	Total sales £m	**Sales between segments £m**	**Sales to third parties £m**	Total sales £m	Sales between segments £m	Sales to third parties £m	Total sales £m	Sales between segments £m	Sales to third parties £m
Operating segments – continuing operations:									
UK Electricity Transmission	**2,035**	**(7)**	**2,028**	1,974	(10)	1,964	1,986	(8)	1,978
UK Electricity Distribution	**1,482**	**(14)**	**1,468**	—	—	—	—	—	—
UK Electricity System Operator	**3,455**	**(18)**	**3,437**	2,018	—	2,018	1,716	—	1,716
New England	**4,550**	**—**	**4,550**	4,214	—	4,214	4,235	—	4,235
New York	**5,561**	**—**	**5,561**	4,605	—	4,605	4,601	—	4,601
NGV and Other	**1,216**	**—**	**1,216**	864	—	864	834	(4)	830
Total revenue before exceptional items and remeasurements	**18,299**	**(39)**	**18,260**	13,675	(10)	13,665	13,372	(12)	13,360
Exceptional items and remeasurements[2]	**189**	**—**	**189**	—	—	—	—	—	—
Total revenue from continuing operations	**18,488**	**(39)**	**18,449**	13,675	(10)	13,665	13,372	(12)	13,360
Split by geographical areas – continuing operations:									
UK			**7,803**			4,368			4,102
US			**10,646**			9,297			9,258
Total revenue from continuing operations			**18,449**			13,665			13,360

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. In connection with the disposal of St William Homes LLP in the year the Group released deferred income within NGV and Other of £189 million related to deferred profits from previous property sales (see note 5).

2. Segmental analysis continued

(b) Operating profit

A reconciliation of the operating segments' measure of profit to profit before tax from continuing operations is provided below. Further details of the exceptional items and remeasurements are provided in note 5.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			After exceptional items and remeasurements		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Operating segments – continuing operations:									
UK Electricity Transmission	**1,067**	1,094	1,109	**(12)**	(14)	(5)	**1,055**	1,080	1,104
UK Electricity Distribution	**909**	—	—	**—**	—	—	**909**	—	—
UK Electricity System Operator	**7**	(60)	211	**(2)**	7	1	**5**	(53)	212
New England	**743**	611	523	**21**	3	(53)	**764**	614	470
New York	**780**	665	835	**315**	30	(465)	**1,095**	695	370
NGV and Other	**307**	117	126	**236**	(52)	(3)	**543**	65	123
Total operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279
Split by geographical area – continuing operations:									
UK	**2,234**	1,113	1,422	**224**	(57)	(8)	**2,458**	1,056	1,414
US	**1,579**	1,314	1,382	**334**	31	(517)	**1,913**	1,345	865
Total operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			After exceptional items and remeasurements		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Reconciliation to profit before tax:									
Operating profit from continuing operations	**3,813**	2,427	2,804	**558**	(26)	(525)	**4,371**	2,401	2,279
Share of post-tax results of joint ventures and associates	**148**	66	88	**(56)**	(8)	(1)	**92**	58	87
Finance income	**65**	35	70	**(15)**	23	(16)	**50**	58	54
Finance costs	**(1,146)**	(900)	(999)	**74**	47	(21)	**(1,072)**	(853)	(1,020)
Profit before tax from continuing operations	**2,880**	1,628	1,963	**561**	36	(563)	**3,441**	1,664	1,400

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation.

(c) Capital expenditure

Capital expenditure represents additions to property, plant and equipment and non-current intangibles but excludes additional investments in and loans to joint ventures and associates.

	Net book value of property, plant and equipment and other intangible assets			Capital expenditure			Depreciation, amortisation and impairment		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
Operating segments:									
UK Electricity Transmission	**14,678**	14,000	13,463	**1,195**	984	951	**(508)**	(460)	(431)
UK Electricity Distribution	**12,522**	—	—	**899**	—	—	**(158)**	—	—
UK Electricity System Operator	**404**	379	336	**108**	88	92	**(83)**	(47)	(38)
New England	**11,485**	10,165	13,127	**1,561**	1,437	1,365	**(364)**	(389)	(373)
New York	**18,676**	16,467	16,920	**1,960**	1,738	1,822	**(537)**	(453)	(436)
NGV and Other	**3,039**	2,750	2,490	**462**	480	562	**(180)**	(136)	(157)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)
Split by geographical area – continuing operations:									
UK	**30,131**	16,627	15,706	**2,546**	1,504	1,560	**(879)**	(596)	(579)
US	**30,673**	27,134	30,630	**3,639**	3,223	3,232	**(951)**	(889)	(856)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)
Asset type:									
Property, plant and equipment	**57,532**	42,424	45,160	**5,714**	4,335	4,465	**(1,544)**	(1,317)	(1,286)
Non-current intangible assets	**3,272**	1,337	1,176	**471**	392	327	**(286)**	(168)	(149)
Total	**60,804**	43,761	46,336	**6,185**	4,727	4,792	**(1,830)**	(1,485)	(1,435)

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

3. Revenue

Revenue arises in the course of ordinary activities and principally comprises:
- transmission services;
- distribution services; and
- generation services.

Transmission services, distribution services and certain other services (excluding rental income but including metering) fall within the scope of IFRS 15 'Revenue from Contracts with Customers', whereas generation services (which solely relate to the contract with the Long Island Power Authority (LIPA) in the US) are accounted for under IFRS 16 'Leases' as rental income, also presented within revenue. Revenue is recognised to reflect the transfer of goods or services to customers at an amount that reflects the consideration to which the Group expects to be entitled to in exchange for those goods or services and excludes amounts collected on behalf of third parties and value added tax. The Group recognises revenue when it transfers control over a product or service to a customer.

Revenue in respect of regulated activities is determined by regulatory agreements that set the price to be charged for services in a given period based on pre-determined allowed revenues. Variances in service usage can result in actual revenue collected exceeding (over-recoveries) or falling short (under-recoveries) of allowed revenues. Where regulatory agreements allow the recovery of under-recoveries or require the return of over-recoveries, the allowed revenue for future periods is typically adjusted. In these instances, no assets or liabilities are recognised for under- or over-recoveries respectively, because the adjustment relates to future services that have not yet been delivered.

Below, we include a description of principal activities, by reportable segment, from which the Group generates its revenue. For more detailed information about our segments, see note 2.

(a) UK Electricity Transmission
The UK Electricity Transmission segment principally generates revenue by providing electricity transmission services in England and Wales. Our business operates as a monopoly regulated by Ofgem, which has established price control mechanisms that set the amount of annual allowed returns our business can earn (along with the Scottish and Offshore transmission operators amongst others).

The transmission of electricity encompasses the following principal services:
- the supply of high-voltage electricity – revenue is recognised based on usage. Our performance obligation is satisfied over time as our customers make use of our network. We bill monthly in arrears and our payment terms are up to 60 days. Price is determined prior to our financial year end with reference to the regulated allowed returns and estimated annual volumes; and
- construction work (principally for connections) – revenue is recognised over time, as we provide access to our network. Customers can either pay over the useful life of the connection or upfront. Where the customer pays upfront, revenues are deferred as a contract liability and released over the life of the asset.

For other construction where there is no consideration for any future services, for example diversions, revenues are recognised as the construction work is completed.

(b) UK Electricity Distribution
The UK Electricity Distribution segment principally generates revenue by providing electricity distribution services in the Midlands and South West of England and South Wales. Similar to UK Electricity Transmission, UK Electricity Distribution operates as a monopoly in the jurisdictions that it operates in and is regulated by Ofgem.

The distribution of electricity encompasses the following principal services:
- electricity distribution – revenue is recognised based on usage by customers (over time), based upon volumes and price. The price control mechanism in place that determines our annual allowances is similar to UK Electricity Transmission. Revenues are billed monthly and payment terms are typically within 14 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability and released over the life of the asset.

For other construction where there is no consideration for any future services, revenues are recognised as the construction is completed.

(c) UK Electricity System Operator
The UK System Operator earns revenue for balancing supply and demand of electricity on Great Britain's electricity transmission system, where it acts as principal. Balancing services are regulated by Ofgem and revenue is recognised as the service is provided.

The System Operator also collects revenues on behalf of transmission operators, principally National Grid Electricity Transmission plc and the Scottish and Offshore transmission operators, from users (electricity suppliers) who connect to or use the transmission system. As the System Operator acts as an agent in this capacity, it therefore records transmission network revenues net of payments to transmission operators.

(d) New England
The New England segment principally generates revenue by providing electricity and gas distribution services and high voltage electricity transmission services in New England. Distribution services are regulated by the Massachusetts Department of Public Utilities (MADPU) and the Rhode Island Public Utilities Commission (RIPUC) and transmission services are regulated by the Federal Energy Regulatory Commission (FERC), both of whom regulate the rates that can be charged to customers.

The distribution of electricity and gas and the provision of electricity transmission facilities encompasses the following principal services:
- electricity and gas distribution and electricity transmission – revenue is recognised based on usage by customers (over time). Revenues are billed monthly and payment terms are 30 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability or customer contributions (where they relate to government entities) and released over the life of the connection.

3. Revenue continued

(e) New York

The New York segment principally generates revenue by providing electricity and gas distribution services and high-voltage electricity transmission services in New York. Distribution services are regulated by the New York Public Service Commission (NYPSC) and transmission services are regulated by the FERC, both of whom regulate the rates that can be charged to customers.

The distribution of electricity and gas and the provision of electricity transmission facilities encompasses the following principal services:

- electricity and gas distribution and electricity transmission – revenue is recognised based on usage by customers (over time). Revenues are billed monthly and payment terms are 30 days; and
- construction work (principally for connections) – revenue is recognised over time as we provide access to our network. Where the customer pays upfront, revenues are deferred as a contract liability or customer contributions (where they relate to government entities) and released over the life of the connection.

(f) NGV and Other

NGV and Other generates revenue from electricity interconnectors, LNG at the Isle of Grain, National Grid Renewables, our UK commercial property business, rental income and insurance.

The Group recognises revenue from transmission services through interconnectors and LNG importation at the Isle of Grain by means of customers' use of capacity and volumes. Revenue is recognised over time and is billed monthly. Payment terms are up to 30 days. Revenues in respect of certain wholly owned interconnector subsidiaries are subject to a cap and floor regime constructed by Ofgem. Where an interconnector expects to breach its total five-year cap, a provision and reduction in revenue is recognised in the current reporting period (see note 26). Where an interconnector does not expect to reach its five-year floor, either an asset will be recognised where a future inflow of economic benefits is considered virtually certain, or a contingent asset will be disclosed where the future inflow is concluded to be probable.

Electricity generation revenue is earned from the provision of energy services and supply capacity to produce energy for the use of customers of LIPA through a power supply agreement where LIPA receives all of the energy and capacity from the asset until at least 2025. The arrangement is treated as an operating lease within the scope of the leasing standard where we act as lessor; with rental income being recorded as other income, which forms part of total revenue. Lease payments (capacity payments) are recognised on a straight-line basis and variable lease payments are recognised as the energy is generated.

Other revenue in the scope of IFRS 15 principally includes sales of renewables projects from National Grid Renewables to Emerald Energy Venture LLC (Emerald), which is jointly controlled by National Grid and Washington State Investment Board (WSIB) (see note 16). National Grid Renewables develops wind and solar generation assets in the US, whilst Emerald has a right of first refusal to buy, build and operate those assets. Revenue is recognised as it is earned.

Other revenue, recognised in accordance with standards other than IFRS 15, includes property sales by our UK commercial property business (including sales to our 50% share in the St William joint venture which was sold on 15 March 2022) and rental income. Property sales are recorded at a point in time (when the sale is legally completed) and rental income is recorded over time.

(g) Disaggregation of revenue

In the following tables, revenue is disaggregated by primary geographical market and major service lines. The table below reconciles disaggregated revenue with the Group's reportable segments (see note 2).

Revenue for the year ended 31 March 2022	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total £m
Revenue under IFRS 15							
Transmission	1,983	–	–	52	405	627	3,067
Distribution	–	1,375	–	4,434	5,110	–	10,919
System Operator	–	–	3,418	–	–	–	3,418
Other[1]	35	89	19	10	10	147	310
Total IFRS 15 revenue	2,018	1,464	3,437	4,496	5,525	774	17,714
Other revenue							
Generation	–	–	–	–	–	373	373
Other[2]	10	4	–	54	36	69	173
Total other revenue	10	4	–	54	36	442	546
Total revenue before exceptional items and remeasurements	2,028	1,468	3,437	4,550	5,561	1,216	18,260
Exceptional items and remeasurements	–	–	–	–	–	189	189
Total revenue from continuing operations	2,028	1,468	3,437	4,550	5,561	1,405	18,449

1. The UK Electricity Transmission and UK Electricity Distribution other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
2. Other revenue, recognised in accordance with accounting standards other than IFRS 15, includes property sales by our UK commercial property business and rental income.

3. Revenue continued

(g) Disaggregation of revenue continued

Geographical split for the year ended 31 March 2022	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total £m
Revenue under IFRS 15							
UK	2,018	1,464	3,437	—	—	646	7,565
US	—	—	—	4,496	5,525	128	10,149
Total IFRS 15 revenue	2,018	1,464	3,437	4,496	5,525	774	17,714
Other revenue							
UK	10	4	—	—	—	35	49
US	—	—	—	54	36	407	497
Total other revenue	10	4	—	54	36	442	546
Total revenue before exceptional items and remeasurements	2,028	1,468	3,437	4,550	5,561	1,216	18,260
Exceptional items and remeasurements	—	—	—	—	—	189	189
Total revenue from continuing operations	2,028	1,468	3,437	4,550	5,561	1,405	18,449

Revenue for the year ended 31 March 2021	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
Transmission	1,875	—	—	74	329	316	2,594
Distribution	—	—	—	4,091	4,226	—	8,317
System Operator	—	—	2,076	—	—	—	2,076
Other[2]	67	—	(61)	8	7	76	97
Total IFRS 15 revenue	1,942	—	2,015	4,173	4,562	392	13,084
Other revenue							
Generation	—	—	—	—	—	376	376
Other[3]	22	—	3	41	43	96	205
Total other revenue	22	—	3	41	43	472	581
Total revenue from continuing operations	1,964	—	2,018	4,214	4,605	864	13,665

Geographical split for the year ended 31 March 2021	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
UK	1,942	—	2,015	—	—	327	4,284
US	—	—	—	4,173	4,562	65	8,800
Total IFRS 15 revenue	1,942	—	2,015	4,173	4,562	392	13,084
Other revenue							
UK	22	—	3	—	—	59	84
US	—	—	—	41	43	413	497
Total other revenue	22	—	3	41	43	472	581
Total revenue from continuing operations	1,964	—	2,018	4,214	4,605	864	13,665

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.
2. The UK Electricity Transmission other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
3. Other revenue, recognised in accordance with accounting standards other than IFRS 15, principally includes property sales by our UK commercial property business and rental income reported in NGV and Other.

3. Revenue continued

(g) Disaggregation of revenue continued

Revenue for the year ended 31 March 2020	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
Transmission	1,898	—	—	77	348	309	2,632
Distribution	—	—	—	4,114	4,205	—	8,319
System Operator	—	—	1,610	—	—	—	1,610
Other[2]	69	—	94	6	6	51	226
Total IFRS 15 revenue	1,967	—	1,704	4,197	4,559	360	12,787
Other revenue							
Generation	—	—	—	—	—	369	369
Other[3]	11	—	12	38	42	101	204
Total other revenue	11	—	12	38	42	470	573
Total revenue from continuing operations	1,978	—	1,716	4,235	4,601	830	13,360

Geographical split for the year ended 31 March 2020	UK Electricity Transmission £m	UK Electricity Distribution £m	UK Electricity System Operator £m	New England £m	New York £m	NGV and Other £m	Total[1] £m
Revenue under IFRS 15							
UK	1,967	—	1,704	—	—	322	3,993
US	—	—	—	4,197	4,559	38	8,794
Total IFRS 15 revenue	1,967	—	1,704	4,197	4,559	360	12,787
Other revenue							
UK	11	—	12	—	—	86	109
US	—	—	—	38	42	384	464
Total other revenue	11	—	12	38	42	470	573
Total revenue from continuing operations	1,978	—	1,716	4,235	4,601	830	13,360

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.
2. The UK Electricity Transmission other IFRS 15 revenue principally relates to engineering recharges, which are the recovery of costs incurred for construction work requested by customers, such as the rerouting of existing network assets. UK Electricity System Operator other IFRS 15 revenue reflects the net income from its role as agent in respect of transmission network revenues. Within NGV and Other, the other IFRS 15 revenue principally relates to revenue generated from our NG Renewables business.
3. Other revenue, recognised in accordance with accounting standards other than IFRS 15, principally includes property sales by our UK commercial property business and rental income reported in NGV and Other.

Contract liabilities (see note 23) represent revenue to be recognised in future periods relating to contributions in aid of construction of £1,472 million (2021: £1,160 million; 2020: £1,158 million). Contract liabilities in the years ended 31 March 2021 and 2020 included amounts in respect of the UK Gas Transmission business of £136 million and £136 million respectively. Revenue is recognised over the life of the asset. The asset lives for connections in UK Electricity Transmission, UK Electricity Distribution, New England and New York are 40 years, 69 years, 51 years and up to 48 years respectively. The weighted average amortisation period is 31 years.

Future revenues in relation to unfulfilled performance obligations not yet received in cash amount to £5.2 billion (2021: £4.8 billion; 2020: £3.1 billion). £1.7 billion (2021: £1.6 billion; 2020: £1.5 billion) relates to connection contracts in UK Electricity Transmission which will be recognised as revenue over 25 years and £3.0 billion (2021: £3.0 billion; 2020: £1.5 billion) relates to revenues to be earned under Grain LNG contracts until 2045. The remaining amount will be recognised as revenue over 3 years.

The amount of revenue recognised for the year ended 31 March 2022 from performance obligations satisfied (or partially satisfied) in previous periods, mainly due to changes in the estimate of the stage of completion, is £nil (2021: £nil; 2020: £nil).

4. Other operating income and costs

Below we have presented separately certain items included in our operating costs from continuing operations. These include a breakdown of payroll costs (including disclosure of amounts paid to key management personnel) and fees paid to our auditors. Other operating income includes gains arising on disposal of interests in other entities.

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2022 £m	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m	**2022 £m**	2021[1] £m	2020[1] £m
(Gain) on disposal of St William Homes LLP (note 5)	**–**	–	–	**(228)**	–	–	**(228)**	–	–
Depreciation, amortisation and impairment	**1,830**	1,485	1,435	**–**	–	–	**1,830**	1,485	1,435
Payroll costs	**1,770**	1,622	1,558	**24**	16	–	**1,794**	1,638	1,558
Purchases of electricity	**1,487**	1,181	1,318	**(207)**	(51)	85	**1,280**	1,130	1,403
Purchases of gas	**1,851**	1,233	1,276	**(185)**	17	40	**1,666**	1,250	1,316
Property and other taxes	**1,202**	1,105	1,100	**–**	–	–	**1,202**	1,105	1,100
UK Electricity Balancing costs	**3,152**	1,875	1,317	**–**	–	–	**3,152**	1,875	1,317
Other	**2,988**	2,412	2,318	**227**	44	400	**3,215**	2,456	2,718
Other operating (income)/costs	**14,280**	10,913	10,322	**(369)**	26	525	**13,911**	10,939	10,847
Provision for bad and doubtful debts	**167**	325	234	**–**	–	–	**167**	325	234
Total operating costs from continuing operations	**14,447**	11,238	10,556	**(369)**	26	525	**14,078**	11,264	11,081
Operating costs from continuing operations include:									
Inventory consumed							**436**	312	315
Research and development expenditure							**11**	12	9

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(a) Payroll costs

	2022 £m	2021[1] £m	2020[1] £m
Wages and salaries[2]	**2,563**	2,170	2,081
Social security costs	**201**	156	152
Defined contribution scheme costs	**81**	67	62
Defined benefit pension costs	**185**	126	125
Share-based payments	**38**	23	16
Severance costs (excluding pension costs)	**5**	9	1
	3,073	2,551	2,437
Less: payroll costs capitalised	**(1,279)**	(913)	(879)
Total payroll costs from continuing operations	**1,794**	1,638	1,558

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Included within wages and salaries are US other post-retirement benefit costs of £39 million (2021: £43 million; 2020: £45 million). For further information refer to note 25.

(b) Number of employees

	31 March 2022	**Monthly average 2022**	31 March 2021[1]	Monthly average 2021[1]	31 March 2020[1]	Monthly average 2020[1]
UK	**11,960**	**11,393**	4,468	4,333	4,185	4,095
US	**17,332**	**17,314**	17,026	16,821	16,748	16,679
Total number of employees (continuing operations)	**29,292**	**28,707**	21,494	21,154	20,933	20,774

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

4. Other operating income and costs continued

(c) Key management compensation

	2022 £m	2021 £m	2020 £m
Short-term employee benefits	7	7	7
Compensation for loss of office	—	—	1
Post-employment benefits	1	1	1
Share-based payments	5	4	3
Total key management compensation	13	12	12

Key management compensation relates to the Board, including the Executive Directors and Non-executive Directors for the years presented.

(d) Directors' emoluments

Details of Executive Directors' emoluments are contained in the Remuneration Report on page 114 and those of Non-executive Directors on page 121.

(e) Auditors' remuneration

Auditors' remuneration is presented below in accordance with the requirements of the Companies Act 2006 and the principal accountant fees and services disclosure requirements of Item 16C of Form 20-F:

	2022 £m	2021 £m	2020 £m
Audit fees payable to the Parent Company's auditors and their associates in respect of:			
Audit of the Parent Company's individual and consolidated financial statements[1]	2.7	2.5	1.9
The auditing of accounts of any associate of the Company	8.9	8.1	8.7
Other services supplied[2]	7.3	6.4	6.3
	18.9	17.0	16.9
Total other services[3]			
All other fees:			
Other assurance services[4]	0.9	0.8	0.6
Other non-audit services not covered above[5]	0.1	2.0	0.5
	1.0	2.8	1.1
Total auditors' remuneration	19.9	19.8	18.0

1. Audit fees in each year represent fees for the audit of the Company's financial statements and regulatory reporting for the years ended 31 March 2022, 2021 and 2020.
2. Other services supplied represent fees payable for services in relation to other statutory filings or engagements that are required to be carried out by the auditors. In particular, this includes fees for reports under section 404 of the US Public Company Accounting Reform and Investor Protection Act of 2002 (Sarbanes-Oxley), audit reports on regulatory returns and the review of interim financial statements for the six-month periods ended 30 September 2021, 2020 and 2019 respectively.
3. There were no tax compliance or tax advisory fees and no audit-related fees as described in Item 16C(b) of Form 20-F.
4. In all years, principally relates to assurance services provided in relation to comfort letters for debt issuances and, in 2021, also includes amounts related to capacity market auction monitoring services.
5. For 2021, includes the class 1 Circular in respect of the acquisition of WPD announced on 18 March 2021. In 2020, other assurance services include auction monitor work on Contracts for Difference, a review of controls over our data on New York customers and IT project assurance.

The Audit & Risk Committee considers and makes recommendations to the Board, to be put to shareholders for approval at each AGM, in relation to the appointment, re-appointment, removal and oversight of the Company's independent auditors. The Committee also considers and approves the audit fees on behalf of the Board in accordance with the Competition and Market Authority Audit Order 2014. The auditors' remuneration is then put to shareholders at each AGM. Details of our policies and procedures in relation to non-audit services to be provided by the independent auditors are set out on page 105 of the Corporate Governance Report.

Certain services are prohibited from being performed by the external auditors under the Sarbanes-Oxley Act. Of the above services, none were prohibited.

Notes to the consolidated financial statements continued

5. Exceptional items and remeasurements

To monitor our financial performance, we use a profit measure that excludes certain income and expenses. We call that measure 'adjusted profit'. Adjusted profit (which excludes exceptional items and remeasurements as defined below) is used by management to monitor financial performance as it is considered that it aids the comparability of our reported financial performance from year to year. We exclude items from adjusted profit because, if included, these items could distort understanding of our performance for the year and the comparability between periods. This note analyses these items, which are included in our results for the year but are excluded from adjusted profit.

Exceptional items and remeasurements from continuing operations

	2022 £m	2021[1] £m	2020[1] £m
Included within operating profit			
Exceptional items:			
Release of St William Homes LLP deferred income	**189**	–	–
Net gain on disposal of St William Homes LLP	**228**	–	–
New operating model implementation costs and cost efficiency programme	**(66)**	(50)	–
Transaction and separation costs	**(223)**	(24)	–
Environmental insurance recovery	**38**	–	–
Changes in environmental provisions	**–**	14	(400)
	166	(60)	(400)
Remeasurements – commodity contract derivatives	**392**	34	(125)
	558	(26)	(525)
Included within finance income and costs			
Remeasurements:			
Net gains/(losses) on financing derivatives	**74**	47	(21)
Net (losses)/gains on financial assets at fair value through profit and loss	**(15)**	23	(16)
	59	70	(37)
Included within share of post-tax results of joint ventures and associates			
Remeasurements:			
Remeasurements – net losses on financial instruments	**(56)**	(8)	(1)
Total included within profit/(loss) before tax	**561**	36	(563)
Included within tax			
Exceptional items – movements arising on items not included in profit before tax:			
Deferred tax charge arising as a result of UK tax rate change	**(458)**	–	(148)
Tax on exceptional items	**(28)**	8	103
Tax on remeasurements	**(103)**	(34)	37
	(589)	(26)	(8)
Total exceptional items and remeasurements after tax	**(28)**	10	(571)
Analysis of total exceptional items and remeasurements after tax			
Exceptional items after tax	**(320)**	(52)	(445)
Remeasurements after tax	**292**	62	(126)
Total exceptional items and remeasurements after tax	**(28)**	10	(571)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

5. Exceptional items and remeasurements continued

Exceptional items

Management uses an exceptional items framework that has been discussed and approved by the Audit & Risk Committee. This follows a three-step process which considers the nature of the event, the financial materiality involved and any particular facts and circumstances. In considering the nature of the event, management focuses on whether the event is within the Group's control and how frequently such an event typically occurs. With respect to restructuring costs, these represent additional expenses incurred that are not related to the normal business and day-to-day activities. In determining the facts and circumstances, management considers factors such as ensuring consistent treatment between favourable and unfavourable transactions, the precedent for similar items, the number of periods over which costs will be spread or gains earned, and the commercial context for the particular transaction. The exceptional items framework was last updated in March 2022 and reflects the latest disclosure requirements arising in respect of FRC guidance issued in the year.

Items of income or expense that are considered by management for designation as exceptional items include significant restructurings, write-downs or impairments of non-current assets, significant changes in environmental or decommissioning provisions, integration of acquired businesses, gains or losses on disposals of businesses or investments and significant debt redemption costs as a consequence of transactions such as significant disposals or issues of equity, and the related tax, as well as deferred tax arising on changes to corporation tax rates.

Costs arising from restructuring programmes include redundancy costs. Redundancy costs are charged to the consolidated income statement in the year in which a commitment is made to incur the costs and the main features of the restructuring plan have been announced to affected employees.

Set out below are details of the transactions against which we have considered the application of our exceptional items framework in each of the years for which results are presented. No COVID-19-related costs incurred have been recognised as exceptional in any of the years presented.

2022

Net gain on disposal of St William Homes LLP and release of deferred income

During the year, the Group recognised a gain of £228 million on the disposal of its entire 50% equity interest in the St William Homes LLP joint venture to The Berkeley Group plc for cash consideration of £413 million (see note 16). In connection with the disposal, the Group also released deferred income of £189 million which related to deferred profits from previous property sales to St William Homes LLP. We have concluded that the release of the deferred income should be classified as exceptional given the crystallisation event for the release is the sale of the Group's equity interest in St William Homes LLP.

New operating model implementation costs and cost efficiency programme

The Group incurred a further £66 million of costs in relation to the design and implementation of our new operating model and the major cost efficiency programme announced in November 2021. The costs recognised primarily relate to professional fees incurred and redundancy provisions. Whilst the costs incurred this year do not meet the quantitative threshold to be classified as exceptional on a standalone basis, when taken in aggregate with the costs expected to be incurred over the duration of the programme, we have concluded that the costs should be classified as exceptional in line with our exceptional items policy. Estimated costs expected to be incurred in future years are disclosed in the Financial review on page 38. The total cash outflow for the period was £48 million.

Transaction and separation costs

£223 million of transaction and separation costs were incurred in the period in relation to the acquisition of WPD (see note 37), the planned disposal of NECO (see note 10) and the planned disposal of our UK Gas Transmission business (see note 10). The costs relate to legal fees, bankers' fees and other professional fees. The costs have been classified as exceptional, consistent with similar costs for the year ended 31 March 2021. The total cash outflow for the year was £196 million.

Environmental insurance recovery

In the US, the most significant component of our £1.9 billion environmental provision relates to several Superfund sites, and arose from former manufacturing gas plant facilities, previously owned or operated by the Group or its predecessor companies. Under Federal and State Superfund laws, potential liability for the historical contamination may be imposed on responsible parties jointly and severally, without regard to fault, even if the activities were lawful when they occurred. In the year, we have recognised an exceptional gain of £38 million relating to an insurance receivable for site remediation costs that are included in our Superfund sites environmental provision. The insurance receipts have been recorded as an exceptional item in line with the treatment of the related costs.

2021

New operating model implementation costs

The Group incurred £50 million of costs in relation to the design and implementation of our new operating model that is built on a foundation of six business units. The costs recognised in the year ended 31 March 2021 primarily related to professional fees incurred and redundancy provisions. In evaluating the costs incurred against the quantitative thresholds in our exceptional items framework we considered the total costs to be incurred over the duration of the programme. Whilst the costs incurred did not meet the quantitative threshold to be classified as exceptional on a standalone basis, we concluded that the costs should be classified as exceptional in line with our exceptional items policy, in order to ensure that the costs are treated in a consistent manner with similar costs incurred previously. The total cash outflow for the year was £33 million.

Transaction and separation costs

£24 million of transaction and separation costs were incurred in relation to the acquisition of WPD (see note 37) and the planned sale of NECO (see note 10). The costs related to legal fees, bankers' fees and professional fees. Whilst the costs incurred in isolation were not sufficiently material to warrant classification as an exceptional item, we expected further costs to be incurred in the next year, for example, in regard to success fees on completion of the acquisition. When taken in aggregate, the costs incurred over both years will be sufficiently material to be classified as exceptional in line with our policy. The total cash outflow for the year was £14 million.

Changes in environmental provision

We recognised an exceptional gain of £14 million relating to the release of environmental provisions relating to one of our US Superfund sites, for which the original provision was treated as an exceptional item. The reduction in the provision arose as a result of the re-evaluation of the Group's share of estimated costs following the finalisation of discussions on the scope of certain remediation work with government authorities. The release was recorded as an exceptional item in line with the treatment of the original provision.

5. Exceptional items and remeasurements continued

2020

Changes in environmental provisions

As a result of notices issued by governmental authorities and newly developed cost estimates prepared by third-party engineers in relation to our US Superfund sites, we re-evaluated our estimates of total costs and cost sharing allocations borne by the Company, and accordingly increased our provision by £326 million. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers, but under IFRS no asset can be recognised for this recovery.

Also included in the total environmental charge was the £74 million (re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation) impact of the change in the real discount rate applied to the environmental provisions across the Group, of which £66 million related to the US and £8 million to the UK. Given the substantial and sustained change in gilts and corporate bond yields, we concluded it was appropriate to reduce the real discount rate from 1% to 0.5%. The weighted average remaining duration of our cash flows is now around 10 years.

Remeasurements

Remeasurements comprise unrealised gains or losses recorded in the consolidated income statement arising from changes in the fair value of certain of our financial assets and liabilities accounted for at fair value through profit and loss (FVTPL). Once the fair value movements are realised (for example, when the derivative matures), the previously recognised fair value movements are then reversed through remeasurements and recognised within earnings before exceptional items and remeasurements. These assets and liabilities include commodity contract derivatives and financing derivatives to the extent that hedge accounting is not available or is not fully effective.

The unrealised gains or losses reported in profit and loss on certain additional assets and liabilities treated at FVTPL are also classified within remeasurements. These relate to financial assets (which fail the 'solely payments of principal and interest test' under IFRS 9), the money market fund investments used by Group Treasury for cash management purposes and the net foreign exchange gains and losses on borrowing activities. These are offset by foreign exchange gains and losses on financing derivatives measured at fair value. In all cases, these fair values increase or decrease because of changes in foreign exchange, commodity or other financial indices over which we have no control.

We report unrealised gains or losses relating to certain discrete classes of financial assets accounted for at FVTPL within adjusted profit. These comprise our portfolio of investments made by National Grid Partners, our investment in Sunrun Neptune 2016 LLC and the contingent consideration arising on the acquisition of National Grid Renewables (all within NGV and Other). The performance of these assets (including changes in fair value) is included in our assessment of adjusted profit for the relevant business units.

Remeasurements excluded from adjusted profit are made up of the following categories:

i. Net gains/(losses) on commodity contract derivatives represent mark-to-market movements on certain physical and financial commodity contract obligations in the US. These contracts primarily relate to the forward purchase of energy for supply to customers, or to the economic hedging thereof, that are required to be measured at fair value and that do not qualify for hedge accounting. Under the existing rate plans in the US, commodity costs are recoverable from customers although the timing of recovery may differ from the pattern of costs incurred;

ii. Net gains/(losses) on financing derivatives comprise gains and losses arising on derivative financial instruments used for the risk management of interest rate and foreign exchange exposures. These exclude gains and losses for which hedge accounting has been effective, and have been recognised directly in the consolidated statement of other comprehensive income or are offset by adjustments to the carrying value of debt (see notes 17 and 32). Net foreign exchange gains and losses on financing derivatives used for the risk management of foreign exchange exposures are offset by foreign exchange losses and gains on borrowing activities;

iii. Net gains/(losses) on financial assets measured at FVTPL comprise gains and losses on the investment funds held by our insurance captives which are categorised as FVTPL (see note 15);

iv. Net gains/(losses) on financial liabilities measured at FVTPL comprise the change in the fair value (excluding changes due to own credit risk) of a financial liability that was designated at FVTPL on transition to IFRS 9 to reduce a measurement mismatch (see note 21); and

v. Unrealised net gains/(losses) on derivatives and other financial instruments within our joint ventures and associates.

Items included within tax

2022

Change in UK corporation tax rate

In the Spring Budget 2021, the UK government announced that from 1 April 2023 the UK corporation tax rate will increase to 25%, and this was substantively enacted on 24 May 2021. Deferred tax balances at 31 March 2022 were remeasured at the enacted rate, with £458 million recognised as exceptional, in line with previous periods.

2020

The Finance Act 2016, which was enacted on 15 September 2016, reduced the main UK corporation tax rate to 17% with effect from 1 April 2020. Deferred tax balances were calculated at this rate for the years ended 31 March 2017 to 2019. On 17 March 2020, the UK government utilised the Provisional Collection of Taxes Act 1968 to substantively enact a reversal of the reduction in the main UK corporation tax rate to 17% with effect from 1 April 2020, resulting in the rate remaining at 19%. Deferred taxes at 31 March 2020 were measured using enacted tax rates and reflected in these financial statements, resulting in a £148 million deferred tax charge (re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation), principally due to the remeasurement of deferred tax liabilities. The treatment of this charge as exceptional was consistent with the treatment for the year ended 31 March 2017 when the original reduction in the tax rate was substantively enacted, resulting in the recognition of an exceptional tax credit of £94 million.

6. Finance income and costs

This note details the interest income generated by our financial assets and interest expense incurred on our financial liabilities, primarily our financing portfolio (including our financing derivatives). It also includes the net interest on our pensions and other post-retirement assets. In reporting adjusted profit, we adjust net financing costs to exclude any net gains or losses on financial instruments included in remeasurements (see note 5).

Finance income and costs remeasurements include unrealised gains and losses on certain assets and liabilities now treated at FVTPL. The interest income, dividends and interest expense on these items are included in finance income and finance costs before remeasurements respectively.

	Notes	2022 £m	2021[1] £m	2020[1] £m
Finance income				
Interest income on financial instruments:				
Bank deposits and other financial assets		**32**	33	48
Dividends received on equities held at fair value through other comprehensive income (FVOCI)		**3**	2	2
Other income		**30**	—	20
		65	35	70
Finance costs				
Net interest on pensions and other post-retirement benefit obligations	25	**—**	(51)	(34)
Interest expense on financial liabilities held at amortised cost:				
Bank loans and overdrafts		**(216)**	(53)	(46)
Other borrowings[2]		**(961)**	(741)	(846)
Interest on derivatives		**(59)**	(47)	(92)
Unwinding of discount on provisions	26	**(73)**	(77)	(75)
Other interest		**11**	(51)	(8)
Less: interest capitalised[3]		**152**	120	102
		(1,146)	(900)	(999)
Remeasurements – Finance income				
Net gains/(losses) on FVTPL financial assets		**(15)**	23	(16)
		(15)	23	(16)
Remeasurements – Finance costs				
Net gains/(losses) on financing derivatives[4]:				
Derivatives designated as hedges for hedge accounting		**45**	30	(14)
Derivatives not designated as hedges for hedge accounting		**29**	17	(7)
		74	47	(21)
Total remeasurements – Finance income and costs		**59**	70	(37)
Finance income		**50**	58	54
Finance costs[5]		**(1,072)**	(853)	(1,020)
Net finance costs from continuing operations		**(1,022)**	(795)	(966)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. Includes interest expense on lease liabilities (see note 13 for details).
3. Interest on funding attributable to assets in the course of construction in the current year was capitalised at a rate of 3.2% (2021: 3.1%; 2020: 3.6%). In the UK, capitalised interest qualifies for a current year tax deduction with tax relief claimed of £16 million (2021: £11 million; 2020: £15 million). In the US, capitalised interest is added to the cost of property, plant and equipment and qualifies for tax depreciation allowances.
4. Includes a net foreign exchange gain on borrowing activities of £110 million (2021: £73 million gain; 2020: £114 million gain) offset by foreign exchange losses and gains on financing derivatives measured at fair value.
5. Finance costs include principal accretion on inflation linked liabilities of £241 million (2021: £46 million; 2020: £85 million).

7. Tax

Tax is payable in the territories where we operate, mainly the UK and the US. This note gives further details of the total tax charge and tax liabilities, including current and deferred tax. The current tax charge is the tax payable on this year's taxable profits. Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future due to differences in the accounting and tax bases.

The tax charge for the period is recognised in the income statement, the statement of comprehensive income or directly in the statement of changes in equity, according to the accounting treatment of the related transaction. The tax charge comprises both current and deferred tax.

Current tax assets and liabilities are measured at the amounts expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amounts are those that have been enacted or substantively enacted by the reporting date.

The Group operates internationally in territories with different and complex tax codes. Management exercises judgement in relation to the level of provision required for uncertain tax outcomes. There are a number of tax positions not yet agreed with the tax authorities where different interpretations of legislation could lead to a range of outcomes. Judgements are made for each position having regard to particular circumstances and advice obtained.

Deferred tax is provided for using the balance sheet liability method, and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases.

Deferred tax liabilities are generally recognised on all taxable temporary differences, and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences arise from the initial recognition of goodwill or from the initial recognition of other assets and liabilities in a transaction (other than a business combination) that affects neither the accounting nor the taxable profit or loss.

Deferred tax liabilities are recognised on taxable temporary differences arising on investments in subsidiaries and joint arrangements except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on the tax rates and tax laws that have been enacted or substantively enacted by the reporting date.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the deferred tax asset to be recovered. Unrecognised deferred tax assets are reassessed at each reporting date and are recognised to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when they relate to income taxes levied by the same tax authority, and the Company and its subsidiaries intend to settle their current tax assets and liabilities on a net basis.

Tax charged/(credited) to the consolidated income statement – continuing operations

	2022 £m	2021[1] £m	2020[1] £m
Tax before exceptional items and remeasurements	669	334	362
Exceptional tax on items not included in profit before tax (note 5)	458	—	148
Tax on other exceptional items and remeasurements	131	26	(140)
Total tax reported within exceptional items and remeasurements	589	26	8
Total tax charge from continuing operations	**1,258**	360	370

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Tax as a percentage of profit before tax

	2022 %	2021[1] %	2020[1] %
Before exceptional items and remeasurements – continuing operations	23.2	20.5	18.4
After exceptional items and remeasurements – continuing operations	36.6	21.6	26.4

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

7. Tax continued

The tax charge for the year can be analysed as follows:

	2022 £m	2021[1] £m	2020[1] £m
Current tax:			
UK corporation tax at 19% (2021: 19%; 2020: 19%)	**255**	157	132
UK corporation tax adjustment in respect of prior years	**(9)**	15	5
	246	172	137
Overseas corporation tax	**6**	3	(2)
Overseas corporation tax adjustment in respect of prior years	**(26)**	(15)	(41)
	(20)	(12)	(43)
Total current tax from continuing operations	**226**	160	94
Deferred tax:			
UK deferred tax	**605**	39	207
UK deferred tax adjustment in respect of prior years	**(5)**	(20)	(4)
	600	19	203
Overseas deferred tax	**425**	174	64
Overseas deferred tax adjustment in respect of prior years	**7**	7	9
	432	181	73
Total deferred tax from continuing operations	**1,032**	200	276
Total tax charge from continuing operations	**1,258**	360	370

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

Tax charged/(credited) to the consolidated statement of comprehensive income and equity

	2022 £m	2021[1] £m	2020[1] £m
Current tax:			
Cash flow hedges, cost of hedging and own credit reserve	**–**	–	–
Deferred tax:			
Investments at fair value through other comprehensive income	**–**	12	(1)
Cash flow hedges, cost of hedging and own credit reserve	**(12)**	6	(38)
Remeasurements of pension assets and post-retirement benefit obligations	**493**	462	(226)
Share-based payments	**(4)**	1	(2)
	477	481	(267)
Total tax recognised in the statements of comprehensive income from continuing operations	**481**	480	(265)
Total tax relating to share-based payments recognised directly in equity from continuing operations	**(4)**	1	(2)
	477	481	(267)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

7. Tax continued

The tax charge for the year after exceptional items and remeasurements, for the continuing business, is higher (2021: higher tax charge; 2020: lower tax charge) than the standard rate of corporation tax in the UK of 19% (2021: 19%; 2020: 19%):

	Before exceptional items and remeasurements 2022 £m	After exceptional items and remeasurements 2022 £m	Before exceptional items and remeasurements 2021[1] £m	After exceptional items and remeasurements 2021[1] £m	Before exceptional items and remeasurements 2020[1] £m	After exceptional items and remeasurements 2020[1] £m
Profit before tax from continuing operations						
Before exceptional items and remeasurements	**2,880**	**2,880**	1,628	1,628	1,963	1,963
Exceptional items and remeasurements	**—**	**561**	—	36	—	(563)
Profit before tax from continuing operations	**2,880**	**3,441**	1,628	1,664	1,963	1,400
Profit before tax from continuing operations multiplied by UK corporation tax rate of 19% (2021: 19%; 2020: 19%)	**547**	**654**	309	316	373	266
Effect of:						
Adjustments in respect of prior years[2]	**(28)**	**(33)**	(10)	(12)	(31)	(31)
Expenses not deductible for tax purposes	**13**	**47**	18	29	24	24
Non-taxable income[3]	**(19)**	**(49)**	(7)	(7)	(18)	(18)
Adjustment in respect of foreign tax rates[4]	**143**	**170**	42	42	53	18
Deferred tax impact of change in UK tax rate	**43**	**501**	—	—	—	148
Adjustment in respect of post-tax profits of joint ventures and associates included within profit before tax	**(28)**	**(17)**	(15)	(12)	(17)	(17)
Other[5]	**(2)**	**(15)**	(3)	4	(22)	(20)
Total tax charge from continuing operations	**669**	**1,258**	334	360	362	370
	%	**%**	%	%	%	%
Effective tax rate – continuing operations	**23.2**	**36.6**	20.5	21.6	18.4	26.4

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.
2. The prior year adjustments are primarily due to agreement of prior period tax returns.
3. Includes tax on chargeable disposals after the offset of capital losses and tax on the profits deferred to the following accounting period.
4. Includes remeasurement of US closing State deferred tax balances as a result of expected increase in the blended State tax rate following the disposal of NECO.
5. Other primarily comprises the movement in the deferred tax asset on previously unrecognised capital losses, claims for land remediation relief and impact of fair value movements on capitalised hedging.

Factors that may affect future tax charges

In the Spring Budget 2021, the UK government announced an increase in the main corporation tax rate from 19% to 25% with effect from 1 April 2023. This was substantively enacted on 24 May 2021. Deferred tax balances as at 31 March 2022, that are expected to reverse after 1 April 2023, have been calculated at 25%.

The US government continues to consider changes to federal tax legislation, but as no changes have been substantively enacted at the balance sheet date, deferred tax balances as at 31 March 2022 have been calculated at the prevailing tax rates based on the current tax laws.

We will continue to monitor the developments driven by Brexit, the OECD's Base Erosion and Profit Shifting (BEPS) project and European Commission initiatives including fiscal aid investigations. At this time, we do not expect this to have any material impact on our future tax charges. Governments across the world including the UK and the US have introduced various stimulus/reliefs for businesses to cope with the impact of the COVID-19 pandemic, from which we do not currently expect there to be a material impact on our future tax charges.

7. Tax continued

Tax included within the statement of financial position

The following are the major deferred tax assets and liabilities recognised, and the movements thereon, during the current and prior reporting periods:

	Regulatory licences £m	Accelerated tax depreciation £m	Share-based payments £m	Pensions and other post-retirement benefits £m	Financial instruments £m	Other net temporary differences[1] £m	Total £m
Deferred tax liabilities/(assets)							
At 1 April 2020	—	6,562	(48)	(360)	(55)	(1,653)	4,446
Exchange adjustments and other[2]	—	(501)	4	51	4	174	(268)
Charged/(credited) to income statement	—	373	—	(12)	1	(147)	215
Charged to other comprehensive income and equity	—	—	2	414	6	—	422
At 1 April 2021	—	6,434	(42)	93	(44)	(1,626)	4,815
Exchange adjustments and other[2]	—	247	(1)	1	1	(85)	163
Charged/(credited) to income statement	—	1,050	26	118	153	(117)	1,230
Charged/(credited) to other comprehensive income and equity	—	—	(6)	587	(10)	—	571
Reclassification to held for sale (note 10)	—	(643)	5	(166)	2	(1)	(803)
Acquisition of WPD (note 37)	429	622	—	142	(403)	(1)	789
At 31 March 2022	**429**	**7,710**	**(18)**	**775**	**(301)**	**(1,830)**	**6,765**

1. The deferred tax asset of £1,830 million as at 31 March 2022 (2021: £1,626 million) in respect of other net temporary differences primarily relates to net operating losses of £428 million (2021: £455 million), US environmental provisions of £511 million (2021: £453 million) and US bad debt provision of £201 million (2021: £184 million).
2. Exchange adjustments and other primarily comprises foreign exchange arising on translation of the US dollar deferred tax balances.

Deferred tax assets and liabilities are only offset where there is a legally enforceable right of offset and there is an intention to settle the balances net. The deferred tax balances (after offset) for statement of financial position purposes consist solely of deferred tax liabilities of £6,765 million (2021: £4,815 million). This balance is after offset of a deferred tax asset of £428 million (2021: £455 million) which has been recognised in respect of net operating losses (£418 million) and capital losses (£10 million).

Deferred tax assets in respect of some capital losses as well as trading losses and non-trade deficits have not been recognised as their future recovery is uncertain or not currently anticipated. The total deferred tax assets not recognised are as follows:

	2022 £m	2021 £m
Capital losses	**2,363**	1,620
Non-trade deficits	**1**	1
Trading losses	**7**	7

The capital losses arose in the UK on disposal of certain businesses or assets. They are available to carry forward indefinitely but can only be offset against future capital gains. The UK non-trade deficits arose prior to 1 April 2017 and therefore can only be offset against future non-trade profits.

At 31 March 2022 and 31 March 2021, there were no recognised deferred tax liabilities for taxes that would be payable on the unremitted earnings of the Group's subsidiaries or its associates as there are no significant corporation tax consequences of the Group's UK, US or overseas subsidiaries or associates paying dividends to their parent companies. There are also no significant income tax consequences for the Group from the payment of dividends by the Group to its shareholders.

8. Earnings per share (EPS)

EPS is the amount of profit after tax attributable to each ordinary share. Basic EPS is calculated on profit after tax for the year attributable to equity shareholders divided by the weighted average number of shares in issue during the year. Diluted EPS shows what the impact would be if all outstanding share options were exercised and treated as ordinary shares at year end. The weighted average number of shares is increased by additional shares issued as scrip dividends and reduced by shares repurchased by the Company during the year. The earnings per share calculations are based on profit after tax attributable to equity shareholders of the Company which excludes non-controlling interests.

Adjusted earnings and EPS, which exclude exceptional items and remeasurements, are provided to reflect the adjusted profit sub-totals used by the Company. We have included reconciliations from this additional EPS measure to earnings for both basic and diluted EPS to provide additional detail for these items. For further details of exceptional items and remeasurements, see note 5.

(a) Basic EPS

	Earnings 2022 £m	**EPS 2022 pence**	Earnings 2021[1] £m	EPS 2021[1] pence	Earnings 2020[1] £m	EPS 2020[1] pence
Adjusted earnings from continuing operations	**2,210**	**61.4**	1,293	36.7	1,600	46.2
Exceptional items and remeasurements after tax from continuing operations (see note 5)	**(28)**	**(0.8)**	10	0.3	(571)	(16.5)
Earnings from continuing operations	**2,182**	**60.6**	1,303	37.0	1,029	29.7
Adjusted earnings from discontinued operations (see note 10)	**344**	**9.6**	340	9.7	317	9.2
Exceptional items and remeasurements after tax from discontinued operations	**(173)**	**(4.8)**	(3)	(0.1)	(82)	(2.4)
Earnings from discontinued operations	**171**	**4.8**	337	9.6	235	6.8
Total adjusted earnings	**2,554**	**71.0**	1,633	46.4	1,917	55.4
Total exceptional items and remeasurements after tax (including discontinued operations)	**(201)**	**(5.6)**	7	0.2	(653)	(18.9)
Total earnings	**2,353**	**65.4**	1,640	46.6	1,264	36.5
		2022 millions		2021 millions		2020 millions
Weighted average number of ordinary shares – basic		**3,599**		3,523		3,461

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(b) Diluted EPS

	Earnings 2022 £m	**EPS 2022 pence**	Earnings 2021[1] £m	EPS 2021[1] pence	Earnings 2020[1] £m	EPS 2020[1] pence
Adjusted earnings from continuing operations	**2,210**	**61.1**	1,293	36.5	1,600	46.0
Exceptional items and remeasurements after tax from continuing operations (see note 5)	**(28)**	**(0.8)**	10	0.3	(571)	(16.4)
Earnings from continuing operations	**2,182**	**60.3**	1,303	36.8	1,029	29.6
Adjusted earnings from discontinued operations	**344**	**9.5**	340	9.6	317	9.1
Exceptional items and remeasurements after tax from discontinued operations (see note 10)	**(173)**	**(4.8)**	(3)	(0.1)	(82)	(2.4)
Earnings from discontinued operations	**171**	**4.7**	337	9.5	235	6.7
Total adjusted earnings	**2,554**	**70.6**	1,633	46.1	1,917	55.1
Total exceptional items and remeasurements after tax (including discontinued operations)	**(201)**	**(5.6)**	7	0.2	(653)	(18.8)
Total earnings	**2,353**	**65.0**	1,640	46.3	1,264	36.3
		2022 millions		2021 millions		2020 millions
Weighted average number of ordinary shares – diluted		**3,616**		3,540		3,478

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(c) Reconciliation of basic to diluted average number of shares

	2022 millions	2021 millions	2020 millions
Weighted average number of ordinary shares – basic	**3,599**	3,523	3,461
Effect of dilutive potential ordinary shares – employee share plans	**17**	17	17
Weighted average number of ordinary shares – diluted	**3,616**	3,540	3,478

9. Dividends

Interim dividends are recognised when they become payable to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

	2022			2021			2020		
	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m	Pence per share	Cash dividend £m	Scrip dividend £m
Interim dividend in respect of the current year	**17.21**	**339**	**282**	17.00	348	249	16.57	335	241
Final dividend in respect of the prior year	**32.16**	**583**	**562**	32.00	1,065	54	31.26	557	517
	49.37	**922**	**844**	49.00	1,413	303	47.83	892	758

The Directors are proposing a final dividend for the year ended 31 March 2022 of 33.76p per share that will absorb approximately £1,231 million of shareholders' equity (assuming all amounts are settled in cash). It will be paid on 18 August 2022 to shareholders who are on the register of members at 4 June 2022 (subject to shareholders' approval at the AGM). A scrip dividend will be offered as an alternative.

10. Assets held for sale and discontinued operations

The results and cash flows of significant assets or businesses sold during the year are shown separately from our continuing operations, and presented within discontinued operations in the income statement and cash flow statement. Assets and businesses are classified as held for sale when their carrying amounts are recovered through sale rather than through continuing use. They only meet the held for sale condition when the assets are ready for immediate sale in their present condition, management is committed to the sale and it is highly probable that the sale will complete within one year. Depreciation ceases on assets and businesses when they are classified as held for sale and the assets and businesses are impaired if the proceeds less sale costs fall short of the carrying value.

(a) Assets held for sale

The following assets and liabilities were classified as held for sale as at 31 March 2022:

	Total assets held for sale £m	Total liabilities held for sale £m	Net assets held for sale £m
The Narragansett Electric Company	**4,129**	**(1,658)**	**2,471**
UK Gas Transmission	**5,871**	**(5,530)**	**341**
Net assets held for sale	**10,000**	**(7,188)**	**2,812**

The Narragansett Electric Company

On 17 March 2021, the Group signed an agreement to sell 100% of the share capital of a wholly owned subsidiary, NECO. NECO is part of our New England segment and is a retail distribution company providing electricity and gas to customers in Rhode Island. The associated assets and liabilities were consequently presented as held for sale in the consolidated financial statements for the year ended 31 March 2021.

As NECO does not represent a separate major line of business or geographical operations, the criteria for classification as a discontinued operation are not met and accordingly its results have not been separately disclosed on the face of the income statement.

Whilst all of the regulatory approvals are in place, the disposal of NECO was not finalised as at 31 March 2022 due to the appeal of one of these approvals by the Rhode Island Attorney General. The following assets and liabilities of NECO were classified as held for sale at 31 March 2022:

	£m
Goodwill	**590**
Intangible assets	**4**
Property, plant and equipment	**3,173**
Trade and other receivables	**251**
Cash and cash equivalents	**6**
Other assets	**105**
Total assets held for sale	**4,129**
Borrowings	**(1,177)**
Pension liabilities	**(12)**
Other liabilities	**(469)**
Total liabilities held for sale	**(1,658)**
Net assets held for sale	**2,471**

No impairment losses were recognised upon remeasurement of the assets and liabilities prior to classification as held for sale. NECO generated profit after tax of £237 million for the year ended 31 March 2022 (2021: £104 million; 2020: £31 million). Current and deferred tax balances relating to NECO have not been included as held for sale on the basis that those balances will be retained by National Grid rather than transferred with the other assets and liabilities of NECO. Furthermore, the tax balances of NECO have been classified within current and non-current assets and liabilities with the corresponding offsets from the other Group members in accordance with the jurisdictional netting principles.

10. Assets held for sale and discontinued operations continued

(a) Assets held for sale continued

UK Gas Transmission

The Group announced its intention to sell the UK Gas Transmission business on 18 March 2021. On 27 March 2022, the Group agreed to sell 100% of the UK Gas Transmission business to a new entity (the 'Acquiring Entity') in exchange for £4.2 billion cash consideration (subject to customary completion adjustments) and a 40% interest in the Acquiring Entity. The other 60% in the Acquiring Entity will be owned by Macquarie Infrastructure and Real Assets (MIRA) and British Columbia Investment Management Corporation (BCI) (together, the 'Consortium'). £2.0 billion of the cash consideration comes from additional debt financing raised by the Acquiring Entity at completion. The sale is expected to complete in the third quarter of the financial year ending 31 March 2023 subject to the receipt of all regulatory approvals.

On 27 March 2022, the Group also entered into a Further Acquisition Agreement (FAA) with the Consortium. This allows the Consortium to purchase the Group's 40% interest in the Acquiring Entity for £1.4 billion plus an annualised escalation factor. The FAA can be exercised either in the period between 1 January and 31 March 2023 or in the period between 1 April and 30 June 2023. The deferral of the option window is at our discretion (subject to change, depending on the timing of the closing of the sale agreement).

The Group classified the associated assets and liabilities of the business as held for sale in the consolidated statement of financial position as at 31 August 2021, when the sale was considered to be highly probable following management approval of the sale timetable and communication thereof to potential buyers. As at 31 March 2022, the following assets and liabilities of the UK Gas Transmission business were classified as held for sale:

	£m
Intangible assets	159
Property, plant and equipment	4,719
Trade and other receivables	215
Pension assets	664
Cash and cash equivalents	9
Financing derivatives	93
Other assets	12
Total assets held for sale	5,871
Borrowings	(4,165)
Deferred tax liabilities	(803)
Other liabilities	(562)
Total liabilities held for sale	(5,530)
Net assets held for sale	**341**

No impairment losses were recognised upon remeasurement of the assets and liabilities prior to classification as held for sale.

(b) Discontinued operations

Planned disposal of UK Gas Transmission

As UK Gas Transmission represents a major separate line of business, the business has also met the criteria for classification as a discontinued operation, and therefore the results of the business have been shown separately from the continuing business for all periods presented on the face of the income statement as a discontinued operation.

Disposal of Quadgas HoldCo Limited

In June 2019, the Group sold its remaining 39% interest in Cadent (held through its holding in Quadgas HoldCo Limited (Quadgas)). The aggregate carrying value of our investment in Quadgas at the disposal date was £1,956 million and the total sales proceeds were £1,965 million, resulting in a gain on disposal of £9 million.

We considered the disposal of our 39% investment in Quadgas as the final stage of the plan to dispose of our interest in the UK Gas Distribution business first announced in 2015, and accordingly treated the results and cash flows arising from Quadgas as a discontinued operation on the basis that the sale formed the final part of a 'single coordinated plan' to dispose of UK Gas Distribution.

10. Assets held for sale and discontinued operations continued

(b) Discontinued operations continued

The summary income statements for UK Gas Transmission and Quadgas, together representing the discontinued operations of the Group, for the years ended 31 March 2022, 2021 and 2020 are as follows:

	Before exceptional items and remeasurements			Exceptional items and remeasurements			Total		
	2022 £m	2021 £m	2020 £m	**2022 £m**	2021 £m	2020 £m	**2022 £m**	2021 £m	2020 £m
Discontinued operations									
Revenue	**1,362**	1,114	1,180	**–**	–	–	**1,362**	1,114	1,180
Other operating costs	**(708)**	(615)	(677)	**(17)**	(5)	(25)	**(725)**	(620)	(702)
Operating profit	**654**	499	503	**(17)**	(5)	(25)	**637**	494	478
Finance income	**–**	–	6	**–**	–	–	**–**	–	6
Finance costs[1]	**(218)**	(77)	(120)	**(12)**	2	(27)	**(230)**	(75)	(147)
Profit before tax	**436**	422	389	**(29)**	(3)	(52)	**407**	419	337
Tax[2]	**(92)**	(82)	(72)	**(144)**	–	(39)	**(236)**	(82)	(111)
Profit after tax from discontinued operations	**344**	340	317	**(173)**	(3)	(91)	**171**	337	226
Gain on disposal	**–**	–	–	**–**	–	9	**–**	–	9
Total profit after tax from discontinued operations	**344**	340	317	**(173)**	(3)	(82)	**171**	337	235

1. Finance costs from discontinued operations include principal accretion of inflation linked liabilities in the UK Gas Transmission business of £158 million (2021: £38 million; 2020: £76 million).
2. Of the £144 million exceptional tax charge in the year ended 31 March 2022, £145 million relates to deferred tax due to the change in the UK corporation tax rate.

The summary statement of comprehensive income for discontinued operations for the years ended 31 March 2022, 2021 and 2020 are as follows:

	2022 £m	2021 £m	2020 £m
Profit after tax from discontinued operations	**171**	337	235
Other comprehensive income/(loss) from discontinued operations			
Items from discontinued operations that will never be reclassified to profit or loss:			
Remeasurement gains/(losses) on pension assets and post-retirement benefit obligations	**309**	(250)	58
Net losses on financial liability designated at fair value through profit and loss attributable to changes in own credit risk	**(1)**	(11)	(3)
Net losses in respect of cash flow hedging of capital expenditure	**–**	(2)	–
Tax on items that will never be reclassified to profit or loss	**(94)**	50	(20)
Total gains/(losses) from discontinued operations that will never be reclassified to profit or loss	**214**	(213)	35
Items from discontinued operations that may be reclassified subsequently to profit or loss:			
Net gains/(losses) in respect of cash flow hedges	**1**	3	(1)
Net (losses)/gains in respect of cost of hedging	**(4)**	(6)	2
Tax on items that may be reclassified subsequently to profit or loss	**–**	–	2
Total losses from discontinued operations that may be reclassified subsequently to profit or loss	**(3)**	(3)	3
Other comprehensive income/(loss) for the year, net of tax from discontinued operations	**211**	(216)	38
Total comprehensive income for the year from discontinued operations	**382**	121	273

Details of the cash flows relating to discontinued operations are set within the consolidated cash flow statement.

Notes to the consolidated financial statements continued

11. Goodwill

Goodwill represents the excess of what we paid to acquire businesses over the fair value of their net assets at the acquisition date. We assess whether goodwill is recoverable by performing an impairment review annually or more frequently if events or changes in circumstances indicate a potential impairment.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rate. Goodwill is allocated to cash-generating units (CGUs) and this allocation is made to those CGUs that are expected to benefit from the acquisition in which the goodwill arose.

Impairment is recognised where there is a difference between the carrying value of the CGU and the estimated recoverable amount of the CGU to which that goodwill has been allocated. Any impairment is recognised immediately in the income statement and is not subsequently reversed. Any impairment loss is first allocated to the carrying value of the goodwill and then to the other assets within the CGU. Recoverable amount is defined as the higher of fair value less costs to sell and estimated value-in-use at the date the impairment review is undertaken. Value-in-use represents the present value of expected future cash flows, discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

	Total £m
Net book value at 1 April 2020	5,712
Exchange adjustments	(562)
Reclassification to held for sale (note 10)	(562)
Net book value at 1 April 2021	4,588
Exchange adjustments	223
Acquisition of WPD (note 37)	4,721
Net book value at 31 March 2022	**9,532**

There was no significant accumulated impairment charge as at 31 March 2022 or 31 March 2021.

Following the announcement of the planned sale of NECO (see note 10), goodwill balances relating to our Rhode Island CGU and a portion of the goodwill relating to our previously reported Federal CGU were reclassified as held for sale in the prior period. Following the implementation of our new operating model during the year ended 31 March 2022, we have reassessed our CGUs. The Federal CGU (£544 million) is now allocated across the New York, New England and National Grid Ventures Renewables CGUs. The Massachusetts CGU (£963 million) is now allocated to the New England CGU. These changes reflect the updated level at which goodwill is now monitored for internal management purposes.

Impairment review of goodwill and indefinite-lived intangibles

Goodwill and indefinite-lived intangibles (see note 12) are reviewed annually for impairment and the recoverability is assessed by comparing the carrying amount of our operations with the expected recoverable amount on a value-in-use basis which uses pre-financing and pre-tax cash flow projections based on the Group's financial plans, approved by the Directors, as a starting point. See below for a summary of which operations our goodwill and indefinite-lived intangibles are allocated to:

CGU or group of CGUs	2022 £m
Goodwill:	
National Grid Ventures Renewables	**150**
New England	**1,510**
New York	**3,151**
WPD[1]	**4,721**
Total goodwill	**9,532**
Indefinite-lived intangibles (regulatory licences related to WPD):	
West Midlands	**518**
East Midlands	**519**
South Wales	**257**
South West	**420**
Total indefinite-lived intangibles	**1,714**

1. This is a combination of the West Midlands, East Midlands, South Wales and South West CGUs, reflecting the level at which the goodwill is monitored.

In each assessment, the value-in-use has been calculated assuming a stable regulatory framework and is based on projections that incorporate our best estimates of future cash flows, including costs, changes in commodity prices, future rates and growth. Such projections reflect our current regulatory agreements, taking into account regulatory arrangements to allow for future agreements and recovery of investment, including those related to achieving the net zero plans of the jurisdictions that we operate in. Our plans have proved to be reliable guides in the past and the Directors believe the estimates are appropriate.

11. Goodwill continued

(a) Cash flow periods, terminal value and discount rate assumptions

We select cash flow durations longer than five years, when our forecasts are considered reliable. The cash flow durations selected reflect our knowledge and understanding of the regulatory environments in which we operate, and most significantly, where markets have legislated decarbonisation commitments by 2050, we utilise longer cash flow forecasts that reflect the investment required to deliver those commitments before applying a terminal value at the point those commitments are due to be fulfilled and market growth is expected to stabilise. For our regulated WPD operations, we consider cash flow durations that run until 2050, reflecting the expected investment required in the network, in excess of economy-wide long-term growth rates in order to deliver the energy transition. For our regulated US operations (New York and New England CGUs), we use a five-year cash flow forecast.

For our WPD business, a nominal terminal growth rate of 2.5% is assumed upon the terminal year cash flows, reflecting management's best view, based on market and operational experience, of the expected long-term growth in the relevant market. For our US regulated operations, due to differences in the regulatory framework and the combination of gas and electricity networks, we apply a growth rate of 2.25%. This has been determined with regard to data on industry growth projections, specifically related to the energy transition, and projected growth in real gross domestic product (GDP) for the territory within which the CGU is based.

Pre-tax cash flows are discounted by applying a pre-tax discount rate reflecting the time value of money and the risks specific to the group of assets. In practice, the post-tax discount rate for the group of assets in question is taken as a starting point, before considering industry peer discount rates to apply adjustments, as required, ensuring the rate applied is independent of the entity's capital structure and to reflect a market participants' view of a risk adjusted discount rate specific to the CGU or group of CGUs. The post-tax discount rate is then grossed up to a pre-tax discount rate that is applied to pre-tax cash flows. The pre-tax discount rates used for the year ended 31 March 2022 were as follows: WPD Group 5.2%; WPD DNOs 4.9%; New York 5.5%; and New England 5.6%.

The discount rate and terminal growth rate applied in the year ended 31 March 2021 to the CGUs assessed at that date were 5.3% and 2.1% respectively.

(b) Key inputs and sensitivity analysis

In assessing the carrying value of goodwill and licences, we have sensitised our forecasts to factor in adjustments to key inputs to each model. Whilst regulatory licences are tested for impairment before we test goodwill, we consider the sensitivity for all balances separately for WPD and our regulated US operations below.

WPD goodwill

We identified the discount rate and the terminal growth rate as key assumptions for which the value-in-use calculation is the most sensitive in our impairment review. A reduction in the terminal growth rate to 2% resulted in WPD's carrying amount equalling its recoverable amount. Considering the sensitivity to the discount rate applied, we found that increasing the pre-tax discount rate by 0.2% (to 5.4%) will result in WPD's carrying amount equalling its recoverable amount (see notes 1 and 35).

WPD indefinite-lived regulatory licences

No reasonable changes to inputs to the impairment test performed over the South West, East Midlands, West Midlands and South Wales Distribution Network Operator CGUs were identified as resulting in an impairment.

Regulated US operations: New York and New England goodwill

While it is possible that a key assumption in the calculation could change, the Directors believe that no reasonably foreseeable change would result in an impairment of goodwill, in view of the long-term nature of the key assumptions and the margin by which the estimated value-in-use exceeds the carrying amount. This remains the case even after taking into account the short-term effects of COVID-19 and inflationary pressures, the most significant of which is an increase in bad debt charges in the short term, but not a risk of impairment to goodwill.

12. Other intangible assets

Other intangible assets include software which is written down (amortised) over the period we expect to receive a benefit from the asset. An amortisation expense is charged to the income statement to reflect the reduced value of the asset over time. Amortisation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

Indefinite-lived intangibles comprise regulatory licences for which there is no foreseeable limit to the period over which they are expected to generate net cash inflows. These assets are considered to have an indefinite life and are not amortised but subject to a review for impairment annually, or more frequently if events or circumstances indicate a potential impairment. Any impairment is charged to the income statement as it arises.

Identifiable intangible assets are recorded at cost less accumulated amortisation and any provision for impairment, with the exception of regulatory licences that are assessed to have indefinite lives and are therefore tested annually for impairment (see note 11 for details of impairment tests performed over indefinite-lived intangible assets). Other intangible assets are tested for impairment only if there is an indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the CGU to which that asset belongs is estimated. Impairments are recognised in the consolidated income statement within Other operating income and costs. Any assets which suffered impairment in a previous period are reviewed for possible reversal of the impairment at each reporting date.

The Group's regulatory licences relate to electricity distribution licences acquired in connection with the Group's acquisition of WPD on 14 June 2021 (see note 37). The licences provide the right to operate and invest in the relevant network that operates as a monopoly in the licensed geographic area. Once granted by Ofgem, the licence is issued to a licensee on the basis that it remains active into perpetuity. On that basis, the value attributed to the electricity distribution network licence assets is considered to have an indefinite useful life.

Internally generated intangible assets, such as software, are recognised only if: i) an asset is created that can be identified; ii) it is probable that the asset created will generate future economic benefits; and iii) the development cost of the asset can be measured reliably. Where no internally generated intangible asset can be recognised, development expenditure is recorded as an expense in the period in which it is incurred.

Cloud computing arrangements are reviewed to determine if the Group has control of the software intangible asset. Control is considered to exist where the Group has the right to take possession of the software and run it on its own or a third party's computer infrastructure or if the Group has exclusive rights to use the software such that the supplier is unable to make the software available to other customers.

Costs relating to configuring or customising the software in a cloud computing arrangement are assessed to determine if there is a separate intangible asset over which the Group has control. If an asset is identified, it is capitalised and amortised over the useful economic life of the asset. To the extent that no separate intangible asset is identified, then the costs are either expensed when incurred or recognised as a prepayment and spread over the term of the arrangement if the costs are concluded to not be distinct.

The accounting for costs incurred in cloud computing arrangements represents the application of new accounting guidance for the Group for the year ended 31 March 2022. Certain costs which were previously capitalised in respect of the Group's cloud computing arrangements have been expensed in the period.

12. Other intangible assets continued

Other than regulatory licences, intangible assets are amortised on a straight-line basis over their estimated useful economic lives. Amortisation periods for other intangible assets are:

	Years
Software	3 to 10
Regulatory licences	Indefinite

	Regulatory licences[1] £m	Software £m	Assets in the course of construction £m	Total £m
Cost at 1 April 2020	—	2,026	557	2,583
Exchange adjustments	—	(102)	(43)	(145)
Additions	—	7	414	421
Disposals	—	(47)	(2)	(49)
Reclassifications[2]	—	255	(240)	15
Reclassification to held for sale (note 10)	—	(19)	—	(19)
Cost at 1 April 2021	—	2,120	686	2,806
Exchange adjustments	—	69	11	80
Additions	—	15	513	528
Acquisition of WPD (note 37)	1,714	49	—	1,763
Disposals	—	(7)	—	(7)
Reclassifications[2]	—	260	(302)	(42)
Reclassification to held for sale (note 10)	—	(431)	(38)	(469)
Cost at 31 March 2022	1,714	2,075	870	4,659
Accumulated amortisation at 1 April 2020	—	(1,288)	—	(1,288)
Exchange adjustments	—	61	—	61
Amortisation charge for the year	—	(196)	—	(196)
Accumulated amortisation of disposals	—	44	—	44
Reclassification to held for sale (note 10)	—	16	—	16
Accumulated amortisation at 1 April 2021	—	(1,363)	—	(1,363)
Exchange adjustments	—	(33)	—	(33)
Amortisation charge for the year	—	(297)	—	(297)
Impairment[3]	—	—	(10)	(10)
Accumulated amortisation of disposals	—	7	—	7
Reclassification to held for sale (note 10)	—	309	—	309
Accumulated amortisation at 31 March 2022	—	(1,377)	(10)	(1,387)
Net book value at 31 March 2022[4]	**1,714**	**698**	**860**	**3,272**
Net book value at 31 March 2021	—	757	686	1,443

1. Relates to the licence intangibles acquired as part of the acquisition of WPD (see note 37). The Group assesses its indefinite-life intangible assets for impairment annually (see note 11).
2. Reclassifications includes amounts transferred to property, plant and equipment (see note 13).
3. Depreciation of assets in the course of construction relates to impairment provision adjustments recognised in the year.
4. The Group has capitalised £366 million (2021: £298 million) in relation to the Gas Business Enablement system in the US, of which £152 million (2021: £82 million) is in service and is being amortised over 10 years, with the remainder included within assets in the course of construction. A further £103 million (2021: £nil) in relation to our new UK general ledger system was reclassified from assets in the course of construction to software assets in the period to 31 March 2022, and is now amortised over 10 years.

13. Property, plant and equipment

Property, plant and equipment are the physical assets controlled by us. The cost of these assets primarily represents the amount initially paid for them or the fair value on the date of acquisition of a business. Cost includes both their purchase price and the construction and other costs associated with getting them ready for operation. A depreciation expense is charged to the income statement to reflect annual wear and tear and the reduced value of the asset over time. Depreciation is calculated by estimating the number of years we expect the asset to be used (useful economic life or UEL) and charging the cost of the asset to the income statement equally over this period.

We operate an energy networks business and therefore have a significant physical asset base. We continue to invest in our networks to maintain reliability, create new customer connections and ensure our networks are flexible and resilient. Our business plan envisages these additional investments will be funded through a mixture of cash generated from operations and the issue of new debt.

Property, plant and equipment is recorded at cost, less accumulated depreciation and any impairment losses. Cost includes the purchase price of the asset; any payroll and finance costs incurred which are directly attributable to the construction of property, plant and equipment together with an appropriate portion of overheads which are directly linked to the capital work performed; and the cost of any associated asset retirement obligations.

Property, plant and equipment includes assets in which the Group's interest comprises legally protected statutory or contractual rights of use. Additions represent the purchase or construction of new assets, including capital expenditure for safety and environmental assets, and extensions to, enhancements to, or replacement of, existing assets. All costs associated with projects or activities which have not been fully commissioned at the period end are classified within assets in the course of construction.

Items within property, plant and equipment are tested for impairment only if there is some indication that the carrying value of the assets may have been impaired. Impairments of assets are calculated as the difference between the carrying value of the asset and the recoverable amount, if lower. Where such an asset does not generate cash flows that are independent from other assets, the recoverable amount of the cash-generating unit to which that asset belongs is estimated. Impairments are recognised in the income statement and if immaterial are included within the depreciation charge for the year.

(a) Analysis of property, plant and equipment

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Cost at 1 April 2020	3,897	59,609	4,771	1,036	69,313
Exchange adjustments	(213)	(3,308)	(130)	(73)	(3,724)
Additions	89	328	4,023	70	4,510
Disposals	(6)	(344)	(26)	(48)	(424)
Reclassifications[1]	96	3,007	(3,243)	77	(63)
Reclassification to held for sale (note 10)	(111)	(3,231)	(174)	(44)	(3,560)
Cost at 1 April 2021	3,752	56,061	5,221	1,018	66,052
Exchange adjustments	97	1,627	111	37	1,872
Additions	22	926	4,843	129	5,920
Acquisition of WPD (note 37)	200	9,512	185	154	10,051
Disposals	(165)	(367)	—	(88)	(620)
Reclassifications[1]	62	4,063	(4,133)	89	81
Reclassification to held for sale (note 10)	(309)	(8,800)	(640)	(267)	(10,016)
Cost at 31 March 2022	3,659	63,022	5,587	1,072	73,340
Accumulated depreciation at 1 April 2020	(847)	(18,042)	—	(662)	(19,551)
Exchange adjustments	37	698	—	46	781
Depreciation charge for the year	(90)	(1,270)	—	(116)	(1,476)
Disposals	—	339	—	48	387
Reclassifications[1]	2	(5)	—	6	3
Reclassification to held for sale (note 10)	22	798	—	27	847
Accumulated depreciation at 1 April 2021	(876)	(17,482)	—	(651)	(19,009)
Exchange adjustments	(20)	(351)	—	(23)	(394)
Depreciation charge for the year[2]	(114)	(1,300)	(48)	(167)	(1,629)
Disposals	29	311	—	88	428
Reclassifications[1]	15	(40)	(18)	2	(41)
Reclassification to held for sale (note 10)	193	4,421	6	217	4,837
Accumulated depreciation at 31 March 2022	(773)	(14,441)	(60)	(534)	(15,808)
Net book value at 31 March 2022	**2,886**	**48,581**	**5,527**	**538**	**57,532**
Net book value at 31 March 2021	2,876	38,579	5,221	367	47,043

1. Represents amounts transferred between categories, (to)/from other intangible assets (see note 12), from inventories and reclassifications between cost and accumulated depreciation.
2. Depreciation of assets in the course of construction relates to impairment provision adjustments recognised in the year.

13. Property, plant and equipment continued

(a) Analysis of property, plant and equipment continued

	2022 £m	2021 £m
Information in relation to property, plant and equipment		
Capitalised interest included within cost	**2,114**	2,233
Contributions to cost of property, plant and equipment included within:		
Trade and other payables	**137**	138
Non-current liabilities	**421**	400
Contract liabilities – current	**130**	66
Contract liabilities – non-current	**1,342**	1,094

(b) Asset useful economic lives

No depreciation is provided on freehold land or assets in the course of construction. Other items of property, plant and equipment are depreciated, on a straight-line basis, at rates estimated to write off their book values over their estimated useful economic lives. In assessing estimated useful economic lives, consideration is given to any contractual arrangements and operational requirements relating to particular assets. The assessments of estimated useful economic lives and residual values of assets are performed annually.

Unless otherwise determined by operational requirements, the depreciation periods for the principal categories of property, plant and equipment are, in general, as shown in the table below split between the UK and US, along with the weighted average remaining UEL for each class of property, plant and equipment (which is calculated by applying the annual depreciation charge per class of asset to the net book value of that class of asset).

	Years		
	UK	US	Weighted average remaining UEL[1]
Freehold and leasehold buildings	up to 60	up to 100	41
Plant and machinery:			
Electricity transmission plant and wires	up to 100	45 to 80	31
Electricity distribution plant	3 to 99	35 to 85	45
Electricity generation plant	n/a	20 to 93	12
Interconnector plant and other	5 to 60	5 to 50	32
Gas plant – mains, services and regulating equipment	n/a	47 to 80	55
Gas plant – storage	5 to 40	12 to 65	12
Gas plant – meters	7 to 30	14 to 40	24
Motor vehicles and office equipment	up to 30	up to 26	5

1. Excluded from the above table are depreciation periods in respect of items of property, plant and equipment which are classified as held for sale as at 31 March 2022.

(c) Gas asset lives

The role that gas networks play in the pathway to achieving the greenhouse gas emissions reductions targets set in the jurisdictions in which we operate is currently uncertain. However, we believe the gas assets which we own and operate today will continue to have a crucial role in maintaining security, reliability and affordability of energy beyond 2050, although the scale and purpose for which the networks will be used is dependent on technological developments and policy choices of governments and regulators.

With respect to our US gas distribution assets, asset lives are assessed as part of detailed depreciation studies completed as part of each separate rate proceeding. Depreciation studies consider the physical condition of assets and the expected operational life of an asset. We believe these assessments are our best estimate of the UEL of our gas network assets in the US.

The weighted average remaining UEL for our US gas distribution fixed asset base is circa 58 years, however a sizeable proportion of our assets are assumed to have UELs which extend beyond 2080. We continue to believe the lives identified by rate proceedings are the best estimate of the assets' UELs, although we continue to keep this assumption under review as we learn more about possible future pathways towards net zero. Whilst the targets, goals and ambitions have now been formalised in legislation in the states in which we operate, there is widespread recognition that work needs to be done to define the possible future decarbonisation pathways. We continue to actively engage and support our regulators to enable the clean energy transition in a safe, reliable and affordable way.

Asset depreciation lives feed directly into our US regulatory recovery mechanisms, such that any shortening of asset lives and regulatory recovery periods as agreed with regulators should be recoverable through future rates, subject to agreement, over future periods, as part of wider considerations around ensuring the continuing affordability of gas in our service territories.

Given the uncertainty described relating to the UELs of our gas assets, below we provide a sensitivity on the depreciation charge for our New York and New England segments were a shorter UEL presumed:

	Increase in depreciation expense for the year ended 31 March 2022		Increase in depreciation expense for the year ended 31 March 2021[1]	
	New York £m	**New England £m**	New York £m	New England £m
UELs limited to 2050	**140**	**40**	125	35
UELs limited to 2060	**67**	**15**	57	13
UELs limited to 2070	**31**	**1**	26	2

1. Comparative amounts have been re-presented to reflect the new operating segments and the classification of the UK Gas Transmission business as a discontinued operation. See notes 1, 2 and 10 for further information.

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13. Property, plant and equipment continued

(c) Gas asset lives continued
Note that this sensitivity calculation excludes any assumptions regarding the residual value for our asset base and the effect that shortening asset depreciation lives would be expected to have on our regulatory recovery mechanisms. In the event that any of the US gas distribution assets are stranded, the Group would expect to recover the associated costs. While recovery is not guaranteed and is determined by regulators in the US, there are precedents for stranded asset cost recovery for US utility companies.

(d) Right-of-use assets
The Group leases various properties, land, equipment and cars. New lease arrangements entered into are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. The right-of-use asset and associated lease liability arising from a lease are initially measured at the present value of the lease payments expected over the lease term. The lease payments include fixed payments, any variable lease payments dependent on an index or a rate, and any break fees or renewal option costs that we are reasonably certain to incur. The discount rate applied is the rate implicit in the lease or, if that is not available, then the incremental rate of borrowing for a similar term and similar security (which is determined based on observable data for borrowing rates for the specific group entity that has entered into the lease, with specific adjustments for the term of the lease and any lease-specific risk premium). The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as computers), the Group continues to recognise a lease expense on a straight-line basis.

The table below shows the movements in the net book value of right-of-use assets included within property, plant and equipment at 31 March 2022 and 31 March 2021, split by category. The associated lease liabilities are disclosed in note 21.

	Land and buildings £m	Plant and machinery £m	Assets in the course of construction £m	Motor vehicles and office equipment £m	Total £m
Net book value at 1 April 2020	364	95	—	225	684
Exchange adjustments	(30)	(4)	—	(22)	(56)
Additions	60	6	—	64	130
Reclassifications	—	—	—	(15)	(15)
Depreciation charge for the year	(29)	(16)	—	(68)	(113)
Net book value at 31 March 2021	365	81	—	184	630
Exchange adjustments	10	1	—	10	21
Additions	14	2	—	88	104
Acquisition of WPD (note 37)	7	2	—	—	9
Reclassification to held for sale (note 10)	(7)	—	—	(4)	(11)
Modifications of leases[1]	(122)	—	—	—	(122)
Disposals	(2)	—	—	(1)	(3)
Depreciation charge for the year	(40)	(16)	—	(67)	(123)
Net book value at 31 March 2022	**225**	**70**	**—**	**210**	**505**

1. The Group entered into an agreement to reduce the lease term of its New England corporate office, Reservoir Woods, with effect from October 2021. The existing lease liability and right-of-use asset have been remeasured based on the terms of the modified lease.

The following balances have been included in the income statement for the years ended 31 March 2022 and 31 March 2021 in respect of right-of-use assets:

	2022 £m	2021 £m
Included within net finance income and costs:		
Interest expense on lease liabilities	**(18)**	(21)
Included within revenue:		
Lease income[1]	**385**	390
Included within operating expenses:		
Expense relating to short-term and low-value leases	**(14)**	(13)

1. Included within lease income is £374 million (2021: £376 million) of variable lease payments, the majority of which relates to the power supply arrangement entered into with LIPA (see note 3).

The total of future minimum sublease payments expected to be received under non-cancellable subleases is £108 million (2021: £104 million).

14. Other non-current assets

Other non-current assets include assets that do not fall into any other non-current asset category (such as goodwill or property, plant and equipment) where the benefit to be received from the asset is not due to be received until after 31 March 2023.

	2022 £m	2021 £m
Other receivables	**110**	45
Non-current tax assets	**6**	6
Prepayments	**–**	5
Accrued income[1]	**187**	237
	303	293

1. Includes accrued income in relation to property sales to St William Homes LLP and other companies within The Berkeley Group. Following completion of the sale of St William Homes LLP on 15 March 2022, the outstanding accrued income due from St William Homes LLP became due from other companies within The Berkeley Group (see note 16).

15. Financial and other investments

The Group holds a range of financial and other investments. These investments include short-term money market funds, quoted investments in equities or bonds of other companies, investments in our venture capital portfolio (National Grid Partners), bank deposits with a maturity of greater than three months, and investments that can not be readily used in operations, principally collateral deposited in relation to derivatives.

The classification of each investment held by the Group is determined based on two main factors:

- its contractual cash flows – whether the assets cash flows are solely payments of the principal and interest on the financial asset on pre-determined dates or whether the cash flows are determined by other factors such as the performance of a company; and
- the business model for holding the investments – whether the intention is to hold onto the investment for the longer term (collect the contractual cash flows), or to sell the asset with the intention of managing any gain or loss on sale or to manage any liquidity requirements.

The four categories of financial and other investments are as follows:

- Financial assets at amortised cost – debt instruments that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is to collect contractual cash flows, are held at amortised cost. This category includes our receivables in relation to deposits and collateral;
- FVOCI debt and other investments – debt investments, such as bonds, that have contractual cash flows that are solely payments of principal and interest, and which are held within a business model whose objective is both to collect the contractual cash flows and to sell the debt instruments, are measured at fair value through other comprehensive income (FVOCI), with gains or losses recognised in the consolidated statement of comprehensive income instead of through the income statement. On disposal, any gains or losses are recognised within finance income in the income statement (see note 6). Other investments include insurance contracts, measured at fair value, and held to back the present value of unfunded pension liabilities in note 25;
- FVOCI equity instruments – the Group previously held equity instruments which it elected to measure at FVOCI on the basis that they were not held for trading and so the recognition of any gains and losses on these investments in the income statement would not have been representative of performance. The shares were held as part of a portfolio of financial instruments which back some long-term employee liabilities. In the year ended 31 March 2022, the Group sold all of the remaining equities as part of a plan to de-risk that investment portfolio. The fair value of the equities on the date of sale was £111 million and upon disposal realised gains and losses of £82 million were transferred to retained earnings (see note 28); and
- FVTPL investments – other financial investments are subsequently measured at fair value with any gains or losses recognised in the income statement (FVTPL). This primarily comprises our money market funds, insurance company fund investments and corporate venture capital investments held by National Grid Partners.

Financial and other investments are initially recognised on trade date. Subsequent to initial recognition, the fair values of financial assets that are quoted in active markets are based on bid prices. When independent prices are not available, fair values are determined using valuation techniques used by the relevant markets using observable market data where possible (see note 32(g) for further details).

15. Financial and other investments continued

	2022 £m	2021 £m
Non-current		
FVOCI debt and other investments	**413**	416
FVOCI equity investments[1]	**–**	99
FVTPL investments	**417**	240
	830	755
Current		
FVTPL investments	**2,292**	1,768
Financial assets at amortised cost	**853**	574
	3,145	2,342
	3,975	3,097
Financial and other investments include the following:		
Investments in short-term money market funds	**1,936**	1,412
Investments held by National Grid Partners	**309**	136
Investments in Sunrun	**109**	103
Balances that are restricted or not readily used in operations:		
Collateral[2]	**806**	540
Insurance company and non-qualified plan investments	**534**	589
Cash surrender value of life insurance policies	**234**	283
Other investments	**47**	34
	3,975	3,097

1. In the year ended 31 March 2022, the Group sold its equity investments which were previously held in relation to non-qualified pension plans in the US.
2. The collateral balance includes £802 million (2021: £480 million) of collateral placed with counterparties with whom we have entered into a credit support annex to the International Swaps and Derivatives Association (ISDA) Master Agreement and £4 million (2021: £18 million) of restricted amounts allocated for specific projects within the National Grid Electricity System Operator. In the year ended 31 March 2021, £42 million of the balance included collateral paid by operating companies as security deposits. In the current year this collateral has been replaced with letters of credit as permitted under the Connection and Use of System Code.

FVTPL and FVOCI investments are recorded at fair value. The carrying value of current financial assets at amortised cost approximates their fair values, primarily due to short-dated maturities. The exposure to credit risk at the reporting date is the fair value of the financial investments. For further information on our credit risk, refer to note 32(a).

For the purposes of impairment assessment, the investments in bonds are considered to be low risk as they are investment grade securities; life insurance policies are held with regulated insurance companies; and deposits, collateral receivable and other financial assets at amortised cost are investment grade. All financial assets held at FVOCI or amortised cost are therefore considered to have low credit risk and have an immaterial impairment loss allowance equal to 12-month expected credit losses.

In determining the expected credit losses for these assets, some or all of the following information has been considered: credit ratings, the financial position of counterparties, the future prospects of the relevant industries and general economic forecasts.

No FVOCI or amortised cost financial assets have had modified cash flows during the period. There has been no change in the estimation techniques or significant assumptions made during the year in assessing the loss allowance for these financial assets. There were no significant movements in the gross carrying value of financial assets during the year that contribute to changes in the loss allowance. No collateral is held in respect of any of the financial investments in the above table. No balances are more than 30 days past due, and no balances were written off during the year.

16. Investments in joint ventures and associates

Investments in joint ventures and associates represent businesses we do not control but over which we exercise joint control or significant influence. They are accounted for using the equity method. A joint venture is an arrangement established to engage in economic activity, which the Group jointly controls with other parties and has rights to a share of the net assets of the arrangement. An associate is an entity which is neither a subsidiary nor a joint venture, but over which the Group has significant influence.

	2022			2021		
	Associates £m	**Joint ventures £m**	**Total £m**	Associates £m	Joint ventures £m	Total £m
Share of net assets at 1 April	**229**	**638**	**867**	341	654	995
Exchange adjustments	**6**	**19**	**25**	(22)	(36)	(58)
Additions	**17**	**469**	**486**	6	75	81
Share of post-tax results for the year	**43**	**49**	**92**	30	28	58
Share of other comprehensive income of associates, net of tax	**1**	**—**	**1**	1	—	1
Dividends received	**(35)**	**(123)**	**(158)**	(31)	(49)	(80)
Disposals	**—**	**(50)**	**(50)**	—	—	—
Other movements[1]	**16**	**(41)**	**(25)**	(96)	(34)	(130)
Share of net assets at 31 March	**277**	**961**	**1,238**	229	638	867

1. Other movements relate to tax liabilities for US and certain UK associates and joint ventures which are borne by the Group and the elimination of profits arising from sales to the Group's share of joint ventures. Within associates, the other movements in the year ended 31 March 2021 primarily relates to the reclassification of the Group's investment in Sunrun from an investment in an associate to financial investments.

A list of joint ventures and associates including the name and proportion of ownership is provided in note 34. Transactions with and outstanding balances with joint ventures and associates are shown in note 31. The joint ventures and associates have no significant contingent liabilities to which the Group is exposed, and the Group has no significant contingent liabilities in relation to its interests in the joint ventures and associates. The Group has capital commitments of £714 million (2021: £141 million) in relation to joint ventures and associates.

On 15 March 2022, the Group disposed of its entire 50% interest in St William Homes LLP to The Berkeley Group for cash consideration of £413 million. The receipt of cash has been recognised within net cash used in investing activities within the cash flow statement. The Group recognised a gain on disposal of £228 million within Other operating income and costs and released to revenue deferred income of £189 million which related to deferred profits related to previous property sales to St William Homes LLP. The gain on disposal and the release of deferred income are both classified as exceptional in the year (see note 5).

The following table describes the Group's material joint ventures and associates at 31 March 2022:

Joint venture	% stake	
BritNed Development Limited[1]	50%	BritNed is a joint venture with the Dutch transmission system operator, TenneT, and operates the subsea electricity link between Great Britain and the Netherlands, commissioned in 2011.
Nemo Link Limited[1]	50%	Nemo is a joint venture with the Belgian transmission operator, Elia, and is a subsea electricity interconnector between Great Britain and Belgium, which became operational on 31 January 2019.
Emerald Energy Venture LLC	51%	Emerald is a joint venture with Washington State Investment Board and builds and operates wind and solar assets. Emerald was acquired on 11 July 2019.
Bight Wind Holdings LLC	27.3%	Bight Wind is a joint venture with RWE Renewables. Following the successful win at auction of six seabed leases in northeastern US on 25 February 2022, Bight Wind will commence the development of an offshore wind project which will play a key role in supplying clean energy to customers in New York. At 31 March 2022, the Group has an amount payable to Bight Wind of £223 million in respect of a capital call to the Group which is payable in April 2022. The assets, liabilities and results of Bight Wind will become material to the Group upon recognition of the seabed lease in the year ending 31 March 2023.

Material associate	% stake	
Millennium Pipeline Company LLC	26.25%	Millennium Pipeline Company LLC is an associate that owns a natural gas pipeline from southern New York to the Lower Hudson Valley.

1. BritNed and Nemo have reporting periods ending on 31 December with monthly management reporting information provided to National Grid.

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16. Investments in joint ventures and associates continued

Summarised financial information as at 31 March, together with the carrying amount of material investments, is as follows:

	BritNed Development Limited		Nemo Link Limited		Emerald Energy Venture LLC		Millennium Pipeline Company LLC	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
Statement of financial position								
Non-current assets	**390**	409	**515**	536	**1,070**	559	**800**	795
Cash and cash equivalents	**77**	47	**7**	31	**134**	112	**33**	27
All other current assets	**10**	24	**7**	8	**8**	12	**29**	24
Non-current liabilities	**(52)**	(50)	**(34)**	(30)	**(182)**	(182)	**(237)**	(256)
Non-current financial liabilities	**(29)**	(31)	**—**	—	**(310)**	(104)	**—**	—
Current liabilities	**(15)**	(22)	**(33)**	(19)	**(66)**	(25)	**(45)**	(38)
Current financial liabilities	**—**	—	**—**	—	**(23)**	(2)	**—**	—
Net assets	**381**	377	**462**	526	**631**	370	**580**	552
Group's ownership interest in joint venture/associate	**191**	189	**231**	263	**322**	189	**152**	145
Group adjustment: elimination of profits on sales to joint venture	**—**	—	**—**	—	**(49)**	(23)	**—**	—
Carrying amount of the Group's investment	**191**	189	**231**	263	**273**	166	**152**	145

	BritNed Development Limited		Nemo Link Limited		Emerald Energy Venture LLC		Millennium Pipeline Company LLC	
	2022 £m	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m	**2022 £m**	2021 £m
Income statement								
Revenue	**131**	72	**148**	66	**25**	28	**200**	199
Depreciation and amortisation	**(15)**	(15)	**(23)**	(24)	**(17)**	(14)	**(43)**	(43)
Other costs	**(9)**	(15)	**(6)**	(6)	**(145)**	(22)	**(20)**	(21)
Operating profit/(loss)	**107**	42	**119**	36	**(137)**	(8)	**137**	135
Net interest expense	**(2)**	(1)	**(1)**	—	**(5)**	—	**(21)**	(18)
Profit/(loss) before tax	**105**	41	**118**	36	**(142)**	(8)	**116**	117
Income tax expense	**(20)**	(11)	**(22)**	(14)	**—**	—	**—**	—
Profit/(loss) for the year	**85**	30	**96**	22	**(142)**	(8)	**116**	117
Group's share of profit/(loss)	**43**	15	**48**	11	**(72)**	(4)	**30**	31
Group adjustment: tax credit/(charge)	**—**	—	**—**	—	**19**	1	**(8)**	(9)
Group's share of post-tax results for the year	**43**	15	**48**	11	**(53)**	(3)	**22**	22

17. Derivative financial instruments

Derivatives are financial instruments that derive their value from the price of an underlying item such as interest rates, foreign exchange rates, credit spreads, commodities, equities or other indices. In accordance with policies approved by the Board, derivatives are transacted generally to manage exposures to fluctuations in interest rates, foreign exchange rates and commodity prices. Our derivatives balances comprise two broad categories:

- financing derivatives: These are used to manage our exposure to interest rates and foreign exchange rates. Specifically, we use these derivatives to manage our financing portfolio, holdings in foreign operations and contractual operational cash flows; and
- commodity contract derivatives: These are used to manage our US customers' exposure to price and supply risks. Some forward contracts for the purchase of commodities meet the definition of derivatives. We also enter into derivative financial instruments linked to commodity prices, including index futures, options and swaps, which are used to manage market price volatility.

Derivatives are initially recognised at fair value and subsequently remeasured to fair value at each reporting date. Changes in fair values are recorded in the period they arise, in either the consolidated income statement or other comprehensive income. Where the gains or losses recorded in the income statement arise from changes in the fair value of derivatives to the extent that hedge accounting is not applied or is not fully effective, these are recorded as remeasurements, detailed in notes 5 and 6. Where the fair value of a derivative is positive it is carried as a derivative asset, and where negative as a derivative liability.

The fair value of derivative financial instruments is calculated by taking the present value of future cash flows, primarily incorporating market observable inputs. The various inputs include foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate and inflation curves, the forward rate curves of underlying commodities, and for those positions that are not fully cash collateralised, the credit quality of the counterparties.

Certain clauses embedded in non-derivative financial instruments or other contracts are presented as derivatives because they impact the risk profile of their host contracts and they are deemed to have risks or rewards not closely related to those host contracts.

Further information on how derivatives are valued and used for risk management purposes is presented in note 32. Information on commodity contracts and other commitments not meeting the definition of derivatives is presented in note 30.

The fair values of derivatives by category are as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current	**282**	**(144)**	**138**	457	(145)	312
Non-current	**305**	**(869)**	**(564)**	542	(754)	(212)
	587	**(1,013)**	**(426)**	999	(899)	100
Financing derivatives	**298**	**(991)**	**(693)**	942	(767)	175
Commodity contract derivatives	**289**	**(22)**	**267**	57	(132)	(75)
	587	**(1,013)**	**(426)**	999	(899)	100

(a) Financing derivatives

The fair values of financing derivatives by type are as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Interest rate swaps	**89**	**(97)**	**(8)**	325	(159)	166
Cross-currency interest rate swaps	**174**	**(642)**	**(468)**	601	(351)	250
Foreign exchange forward contracts[1]	**35**	**(65)**	**(30)**	16	(74)	(58)
Inflation-linked swaps	**—**	**(187)**	**(187)**	—	(183)	(183)
	298	**(991)**	**(693)**	942	(767)	175

1. Included within the foreign exchange forward contracts balance are £21 million (2021: £32 million) of derivative liabilities in relation to the hedging of capital expenditure and a deal-contingent foreign exchange forward contract liability of £nil (2021: £9 million) in relation to the disposal of NECO (see note 10).

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17. Derivative financial instruments continued

(a) Financing derivatives continued

The maturity profile of financing derivatives is as follows:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Current						
Less than 1 year	34	(136)	(102)	428	(70)	358
	34	(136)	(102)	428	(70)	358
Non-current						
In 1 to 2 years	6	(29)	(23)	10	(14)	(4)
In 2 to 3 years	28	(39)	(11)	24	(12)	12
In 3 to 4 years	—	(26)	(26)	62	(80)	(18)
In 4 to 5 years	12	(16)	(4)	4	(42)	(38)
More than 5 years	218	(745)	(527)	414	(549)	(135)
	264	(855)	(591)	514	(697)	(183)
	298	(991)	(693)	942	(767)	175

The notional contract amounts of financing derivatives by type are as follows:

	2022 £m	2021 £m
Interest rate swaps	(1,607)	(2,259)
Cross-currency interest rate swaps	(10,397)	(8,389)
Foreign exchange forward contracts	(6,371)	(4,651)
Inflation-linked swaps	(500)	(500)
	(18,875)	(15,799)

London Inter-bank Offered Rate (LIBOR) is being replaced as an interest rate benchmark by alternative reference rates and therefore we are transitioning LIBOR cash flows on our affected contracts in line with the relevant jurisdictions. During the year we transitioned derivatives which pay or receive cash flows that reference GBP LIBOR (maturing between 2023 and 2040) to alternative reference rates (not transitioned in 2021: £2,041 million, maturing between 2023 and 2026). Derivatives with a notional value of £806 million that reference USD LIBOR (maturing between 2023 and 2026) are yet to be amended (2021: £769 million, maturing between 2023 and 2026).

(b) Commodity contract derivatives

The fair values of commodity contract derivatives by type are as follows:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Commodity purchase contracts accounted for as derivative contracts						
Forward purchases of gas	11	(6)	5	44	(94)	(50)
Derivative financial instruments linked to commodity prices						
Electricity capacity	1	—	1	2	—	2
Electricity swaps	208	(10)	198	10	(33)	(23)
Electricity options	5	—	5	—	(1)	(1)
Gas swaps	29	(6)	23	1	(3)	(2)
Gas options	35	—	35	—	(1)	(1)
	289	(22)	267	57	(132)	(75)

17. Derivative financial instruments continued

(b) Commodity contract derivatives continued

The maturity profile of commodity contract derivatives is as follows:

	2022			2021		
	Assets £m	**Liabilities £m**	**Total £m**	Assets £m	Liabilities £m	Total £m
Current						
Less than one year	**248**	**(8)**	**240**	29	(75)	(46)
	248	**(8)**	**240**	29	(75)	(46)
Non-current						
In 1 to 2 years	**34**	**(6)**	**28**	7	(24)	(17)
In 2 to 3 years	**5**	**(5)**	**—**	7	(16)	(9)
In 3 to 4 years	**2**	**(2)**	**—**	7	(7)	—
In 4 to 5 years	**—**	**(1)**	**(1)**	6	(5)	1
More than 5 years	**—**	**—**	**—**	1	(5)	(4)
	41	**(14)**	**27**	28	(57)	(29)
	289	**(22)**	**267**	57	(132)	(75)

The notional quantities of commodity contract derivatives by type are as follows:

	2022	2021
Forward purchases of gas[1]	**28m Dth**	36m Dth
Electricity swaps	**13,458 GWh**	12,321 GWh
Gas swaps	**39m Dth**	47m Dth
Gas options	**59m Dth**	40m Dth

1. Forward gas purchases have terms up to one year (2021: five years). The contractual obligations under these contracts are £86 million (2021: £104 million).

18. Inventories and current intangible assets

Inventories represent assets that we intend to use in order to generate revenue in the short term, either by selling the asset itself (for example, fuel stocks) or by using it to fulfil a service to a customer or to maintain our network (consumables).

Inventories are stated at the lower of weighted average cost and net realisable value. Where applicable, cost comprises direct materials and direct labour costs as well as those overheads that have been incurred in bringing the inventories to their present location and condition.

Emission allowances, principally relating to the emissions of carbon dioxide in the UK and sulphur and nitrous oxides in the US, are recorded as intangible assets within current assets. They are initially recorded at cost and subsequently at the lower of cost and net realisable value. A liability is recorded in respect of the obligation to deliver emission allowances, and emission charges are recognised in the income statement in the period in which emissions are made.

	2022 £m	2021 £m
Fuel stocks	**96**	94
Raw materials and consumables	**297**	253
Current intangible assets – emission allowances	**118**	92
	511	439

There is a provision for obsolescence of £7 million against inventories as at 31 March 2022 (2021: £10 million).

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19. Trade and other receivables

Trade and other receivables include amounts which are due from our customers for services we have provided, accrued income which has not yet been billed, prepayments, contract assets where certain milestones are required to be fulfilled and other receivables that are expected to be settled within 12 months.

Trade and other receivables are initially recognised at fair value and subsequently measured at amortised cost, less any appropriate allowances for estimated irrecoverable amounts.

	2022 £m	2021 £m
Trade receivables	2,661	2,152
Accrued income	1,110	886
Provision for impairment of receivables and accrued income	(741)	(672)
Trade receivables and accrued income, net	3,030	2,366
Prepayments	429	387
Contract assets	33	13
Other receivables	223	153
	3,715	2,919

Trade receivables are non-interest-bearing and generally have an up to 60 days term. Due to their short maturities, the fair value of trade and other receivables approximates their carrying value. The maximum exposure of trade and other receivables to credit risk is the carrying amount reported on the balance sheet.

Provision for impairment of receivables
A provision for credit losses is recognised at an amount equal to the expected credit losses that will arise over the lifetime of the trade receivables and accrued income.

	2022 £m	2021 £m
At 1 April	672	512
Exchange adjustments	31	(57)
Charge for the year, net of recoveries	167	326
Uncollectible amounts written off	(124)	(59)
Reclassification to held for sale (note 10)	(5)	(50)
At 31 March	741	672

The trade receivables balance, accrued income balance and provisions balance split by geography are as follows:

	As at 31 March 2022			As at 31 March 2021		
	UK £m	US £m	Total £m	UK £m	US £m	Total £m
Trade receivables	352	2,309	2,661	227	1,925	2,152
Accrued income	715	395	1,110	547	339	886
Provision for impairment of receivables and accrued income	(43)	(698)	(741)	(23)	(649)	(672)
	1,024	2,006	3,030	751	1,615	2,366

There are no retail customers in the UK businesses. A provision matrix is not used in the UK as an assessment of expected losses on individual debtors is performed, and the provision is not material.

In the US, £2,243 million (2021: £1,852 million) of the trade receivables and accrued income balance is attributable to retail customers. For non-retail US customer receivables, a provision matrix is not used and expected losses are determined on individual debtors.

The provision for retail customer receivables in the US is calculated based on a series of provision matrices which are prepared by regulated entity and by customer type. The expected loss rates in each provision matrix are based on historical loss rates adjusted for current and forecasted economic conditions at the balance sheet date. The inclusion of forward-looking information in the provision matrix setting process under IFRS 9 results in loss rates that reflect expected future economic conditions and the recognition of an expected loss on all debtors even where no loss event has occurred.

In March 2020, the Group's US distribution businesses ceased certain customer cash collection activities in response to regulatory instructions and to changes in State, Federal and City level regulations and guidance, and actions to minimise risk to the Group's employees as a result of COVID-19. At that time, the Group also ceased customer termination activities as requested by relevant local authorities. Collection and customer termination activities resumed in New England during the year ended 31 March 2022, where permitted. Whilst certain collection activities also resumed in New York in the year, we expect to resume full collection activities over the course of the next year. Collection activities have also been supported by certain government COVID funding programmes in both New England and New York.

In calculating our provision for impairment of receivables at 31 March 2022, we were able to incorporate the actual cash collection levels experienced for the two years since the start of the pandemic to determine the expected loss rates per category of outstanding receivable by operating company, which is summarised in the provision matrix shown below. Factored into our analysis are expected cash collections based on the resumed collection activities in New England and New York during the year.

19. Trade and other receivables continued

Based on our review, we recognised a charge of £139 million which represents our best estimate based on the information available. For the year ended 31 March 2021, we recognised a charge of £325 million due to the ongoing reduction of customer terminations and collections which were ceased in the preceding year and not fully recovered as at 31 March 2022. We based our review of certain macroeconomic factors at the time, including unemployment levels and our experience regarding debtor recoverability during and in the aftermath of the 2008/09 financial crisis.

The average expected loss rates and gross balances for the retail customer receivables in our US operations are set out below:

	2022		2021	
	%	£m	%	£m
Accrued income	5	382	7	322
0 – 30 days past due	5	731	7	580
30 – 60 days past due	20	213	24	155
60 – 90 days past due	32	123	36	108
3 – 6 months past due	41	161	52	140
6 – 12 months past due	56	177	66	180
Over 12 months past due	71	456	71	367
		2,243		1,852

US retail customer receivables are not collateralised. Trade receivables are written off when regulatory requirements are met. Write-off policies vary between jurisdictions as they are aligned with the local regulatory requirements, which differ between regulators. There were no significant amounts written off during the period that were still subject to enforcement action. Our internal definition of default is aligned with that of the individual regulators in each jurisdiction.

For further information on our wholesale and retail credit risk, refer to note 32(a).

20. Cash and cash equivalents

Cash and cash equivalents include cash balances, together with short-term investments with an original maturity of less than three months that are readily convertible to cash.

Net cash and cash equivalents reflected in the cash flow statement are net of bank overdrafts, which are reported in borrowings. The carrying amounts of cash and cash equivalents and bank overdrafts approximate their fair values.

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for periods varying between one day and three months, depending on the immediate cash requirements, and earn interest at the respective short-term deposit rates.

Cash and cash equivalents held in currencies other than sterling have been converted into sterling at year-end exchange rates. For further information on currency exposures, refer to note 32(c).

Cash and cash equivalents at 31 March 2022 include £14 million (2021: £12 million) that is restricted. The restricted cash balances include amounts required to be maintained for insurance purposes and cash balances that can only be used for low-carbon network fund projects.

	2022 £m	2021 £m
Cash at bank	204	117
Short-term deposits	–	40
Cash and cash equivalents	**204**	157

21. Borrowings

We borrow money primarily in the form of bonds and bank loans. These are for a fixed term and may have fixed or floating interest rates or are linked to inflation indices. We use derivatives to manage risks associated with interest rates, inflation rates and foreign exchange. Lease liabilities are also included within borrowings.

Our price controls and rate plans lead us to fund our networks within a certain ratio of debt to equity or regulatory asset value and, as a result, we have issued a significant amount of debt. As we continue to invest in our networks, the value of debt is expected to increase over time. To maintain a strong balance sheet and to allow us to access capital markets at commercially acceptable interest rates, we balance the amount of debt we issue with the value of our assets, and we take account of certain other metrics used by credit rating agencies.

All borrowings are measured at amortised cost, with the exception of one current liability which was measured at fair value through profit and loss in order to eliminate a measurement mismatch. This current liability has now matured.

Borrowings, which include interest-bearing, zero-coupon and inflation-linked debt, overdrafts and collateral payable, are initially recorded at fair value. This normally reflects the proceeds received (net of direct issue costs for liabilities measured at amortised cost). Subsequently, borrowings are stated either: i) at amortised cost; or ii) at fair value though profit and loss. Where a borrowing is held at amortised cost, any difference between the proceeds after direct issue costs and the redemption value is recognised over the term of the borrowing in the income statement using the effective interest method. For the liability held at fair value through profit and loss, interest is calculated using the effective interest method.

Where a borrowing or liability is held at fair value, changes in the fair value of the borrowing due to changes in the issuer's credit risk are recorded in the own credit reserve within equity (see note 28). All other changes in the fair value of the liability are recognised in the income statement within remeasurements (see notes 5 and 6).

	2022 £m	2021 £m
Current		
Bank loans[1]	**8,976**	1,022
Bonds[2]	**1,735**	1,987
Commercial paper	**1,303**	628
Lease liabilities	**107**	99
Other loans	**–**	1
	12,121	3,737
Non-current		
Bank loans	**2,211**	2,532
Bonds	**30,682**	24,209
Lease liabilities	**451**	586
Other loans	**–**	156
	33,344	27,483
Total borrowings	**45,465**	31,220

1. Current bank loans include £8,179 million of borrowings under the bridge facility relating to the acquisition of WPD (31 March 2021: undrawn). The bridge facility allows for the extension of the maturity date up to September 2023 but includes a requirement that the proceeds of the planned sales of NECO and the UK Gas Transmission business are applied to repay the facility. As these are expected to completed within one year the position has been classified as current.
2. Includes a liability held at fair value through profit and loss of £nil (2021: £682 million).

21. Borrowings continued

Total borrowings are repayable as follows:

	2022 £m	2021 £m
Less than 1 year	**12,121**	3,737
In 1 to 2 years	**1,410**	1,745
In 2 to 3 years	**2,544**	889
In 3 to 4 years	**2,580**	2,206
In 4 to 5 years	**2,493**	1,833
More than 5 years:		
By instalments	**869**	927
Other than by instalments	**23,448**	19,883
	45,465	31,220

The fair value of borrowings at 31 March 2022 was £45,624 million (2021: £34,676 million). Where market values were available, the fair value of borrowings (Level 1) was £24,454 million (2021: £20,333 million). Where market values were not available, the fair value of borrowings (Level 2) was £21,170 million (2021: £14,343 million), and calculated by discounting cash flows at prevailing interest rates. The notional amount outstanding of the debt portfolio at 31 March 2022 was £44,055 million (2021: £31,010 million). There have been no new issuances since the year end.

Collateral is placed with or received from any derivative counterparty where we have entered into a credit support annex to the ISDA Master Agreement once the current mark-to-market valuation of the trades between the parties exceeds an agreed threshold. Included in current bank loans is £60 million (2021: £582 million) in respect of cash received under collateral agreements. For further details of our borrowing facilities, refer to note 33. For further details of our bonds in issue, please refer to the debt investor section of our website. Unless included herein, the information on our website is unaudited.

Certain borrowings, primarily some of our USD denominated bank loans and company car lease contracts, have payments that are linked to LIBOR. LIBOR is being replaced as an interest rate benchmark by alternative reference rates and therefore we are transitioning LIBOR cash flows on our affected contracts in line with the relevant jurisdictions. The migration project is underway, with all affected contracts where we previously paid or received GBP LIBOR amended in the year to 31 March 2022. £314 million (2021: £328 million) of bank loans affected by GBP LIBOR have been transitioned to alternative reference rates. £181 million (2021: £173 million) of lease liabilities affected by USD LIBOR have been transitioned to alternative rates and £110 million (2021: £59 million) of bank loans affected by USD LIBOR have yet to be amended.

Financial liability at fair value through profit and loss

The financial liability was designated at fair value through profit and loss. Up until the date of maturity in November 2021, the liability was analysed as follows:

i. the fair value of the liability at maturity in November 2021 was £699 million (2021: £682 million), which included cumulative changes in fair value attributable to changes in credit risk recognised in other comprehensive income, post tax of £nil (2021: £1 million);
ii. the amount repayable at maturity in November 2021 was £699 million (2021: £684 million); and
iii. the difference between carrying amount and contractual amount at maturity was £nil (2021: £2 million).

This liability was reclassified in order to eliminate a measurement mismatch with derivatives which provide an economic hedge. The associated derivatives were collateralised and did not contain significant exposure to our own credit risk. The presentation of credit risk in other comprehensive income did not, therefore, create or enlarge an accounting mismatch in profit or loss.

The change in the fair value attributable to a change in credit risk was calculated as the difference between the total change in the fair value of the liability and the change in the value of the liability due to changes in market risk factors alone. The change in the fair value due to market risk factors was calculated using benchmark yield curves as at the end of the reporting period holding the credit risk margin constant. The fair value of the liability was calculated using observed market prices.

21. Borrowings continued

Lease liabilities

Lease liabilities are initially measured at the present value of the lease payments expected over the lease term. The discount rate applied is the rate implicit in the lease or if that is not available, then the incremental rate of borrowing for a similar term and similar security. The lease term takes account of exercising any extension options that are at our option if we are reasonably certain to exercise the option and any lease termination options unless we are reasonably certain not to exercise the option. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to the income statement over the lease period using the effective interest rate method.

	2022 £m	2021 £m
Gross lease liabilities are repayable as follows:		
Less than 1 year	**132**	114
1 to 5 years	**282**	321
More than 5 years	**259**	464
	673	899
Less: finance charges allocated to future periods	**(115)**	(214)
	558	685
The present value of lease liabilities are as follows:		
Less than 1 year	**107**	99
1 to 5 years	**247**	267
More than 5 years	**204**	319
	558	685

22. Trade and other payables

Trade and other payables include amounts owed to suppliers, tax authorities and other parties which are due to be settled within 12 months. The total also includes deferred amounts, some of which represent monies received from customers but for which we have not yet delivered the associated service. These amounts are recognised as revenue when the service is provided.

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2022 £m	2021 £m
Trade payables	**3,113**	2,165
Deferred payables	**487**	154
Customer contributions[1]	**137**	138
Social security and other taxes	**278**	140
Contingent consideration	**34**	39
Other payables	**866**	881
	4,915	3,517

1. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

Due to their short maturities, the fair value of trade payables approximates their carrying value.

23. Contract liabilities

Contract liabilities primarily relate to the advance consideration received from customers for construction contracts, mainly in relation to connections, for which revenue is recognised over the life of the asset.

	2022 £m	2021 £m
Current	**130**	66
Non-current	**1,342**	1,094
	1,472	1,160

Significant changes in the contract liabilities balances during the period are as follows:

	2022 £m	2021 £m
As at 1 April	**1,160**	1,158
Exchange adjustments	**29**	(65)
Revenue recognised that was included in the contract liability balance at the beginning of the period	**(53)**	(96)
Increases due to cash received, excluding amounts recognised as revenue during the period	**510**	262
Reclassification to held for sale (note 10)	**(174)**	(99)
At 31 March	**1,472**	1,160

24. Other non-current liabilities

Other non-current liabilities include deferred income and customer contributions which will not be recognised as income until after 31 March 2023. It also includes contingent consideration and other payables that are not due until after that date.

Other non-current liabilities are initially recognised at fair value and subsequently measured at amortised cost, with the exception of contingent consideration, which is subsequently measured at fair value.

	2022 £m	2021 £m
Deferred income[1]	**41**	78
Customer contributions[2]	**421**	400
Contingent consideration	**7**	18
Other payables	**336**	347
	805	843

1. In the year ended 31 March 2021, principally the deferral of profits relating to the sale of property to St William Homes LLP, which were expected to be recognised in future years. In the year ended 31 March 2022, the Group disposed of its interests in St William Homes LLP, resulting in a release of previously deferred profits (see note 16).
2. Relates to amounts received from government-related entities for connecting to our networks, where we have obligations remaining under the contract.

There is no material difference between the fair value and the carrying value of other payables.

25. Pensions and other post-retirement benefits

All of our employees are eligible to participate in a pension plan. We have defined contribution (DC) and defined benefit (DB) pension plans in the UK and the US. In the US we also provide healthcare and life insurance benefits to eligible employees, post-retirement. The fair value of associated plan assets and present value of DB obligations are updated annually in accordance with IAS 19 'Employee Benefits'. We separately present our UK and US pension plans to show the geographical split. Below we provide a more detailed analysis of the amounts recorded in the primary financial statements and the actuarial assumptions used to value the DB obligations.

UK pension plans

Defined contribution plan

Employees of National Grid's legacy UK businesses are eligible to join the National Grid UK Retirement Plan (NGUKRP), a section of a Master Trust arrangement managed by Legal & General. National Grid pays contributions into the NGUKRP to provide DC benefits on behalf of its employees, generally providing a double match of member contributions up to a maximum Company contribution of 12% of salary. Additionally, WPD operates a DC pension plan (WPPS) which includes three separate DC sections. Two of the DC sections are closed with no active members at 31 March 2022. There is also an open section, available to all new WPD employees.

These plans are defined contribution in nature and are designed to provide members with a pension pot for their retirement. As such, investment risks are borne by the member and there is no legal or constructive obligation on National Grid to pay additional contributions in the instance that investment performance is poor. Payments to these DC plans are charged as an expense as they fall due.

Defined benefit plans

National Grid operates various DB pension plans in the UK. These include two legally separate sections of the National Grid UK Pension Scheme (Section A and Section B of NGUKPS), three sections of the industry-wide Electricity Supply Pension Scheme (ESPS) and a legacy scheme (WPUPS). During the year, following National Grid's announcement of its intention to sell its Gas Transmission and Metering businesses, Section B of NGUKPS was reallocated as held for sale. Each of these plans holds its assets in separate Trustee administered funds. The arrangements are managed by Trustee companies with boards consisting of company- and member-appointed directors. These plans are all closed to new members except for the ESPS schemes in very rare circumstances.

The arrangements are subject to independent actuarial funding valuations every three years, and following consultation and agreement with the Company, the qualified actuary certifies the employers' contributions, which, together with the specified contributions payable by the employees and proceeds from the plans' assets, are expected to be sufficient to fund the benefits payable. The latest full actuarial valuations for each of the DB plans were carried out at 31 March 2019, with the Company agreeing to fund the assessed funding shortfalls for the UK DB plans that were in deficit via recovery plan payments scheduled to finish in November 2024 or earlier, with payments of approximately £130 million across all plans still due to be paid. Separately, National Grid continues to fund the cost of future benefit accrual (over and above member contributions) for each of the DB schemes. In the year to March 2022, the aggregate level of ongoing contributions (excluding recovery plan payments) was £83 million (2021: £50 million; 2020: £70 million). National Grid also pays contributions in respect of the costs of plan administration and the Pension Protection Fund (PPF) levies for most of its DB plans.

In addition, for some plans the Company has also agreed to establish security arrangements with charges in favour of the Trustee. The value of security provided across National Grid's DB plans was £286 million at 31 March 2022, all of which is currently provided in the form of surety bonds but may also be provided as letters of credit or cash. The assets held as security will be paid to the respective section or plan in the event that the relevant supporting employer is subject to an insolvency event or fails to make the required contributions; and applicable to NGEG of ESPS only, if NGET loses its licence to operate under relevant legislation. Counter indemnities have also been taken out to ensure the obligations will be fulfilled. In addition, further cash payments of up to a maximum of £675 million could also become due if certain trigger events occur which have been individually agreed between the plans and their relevant supporting employers.

A guarantee has also been provided to Section A of NGUKPS, with the payment contingent on insolvency or on failure to pay pension obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited.

US pension plans

The US pension plans are governed by a fiduciary committee called the Retirement Plan Committee (RPC). The RPC is structured in accordance with US laws governing retirement plans under the Employee Retirement Income Security Act and comprises appointed employees of the Company.

Defined contribution plans

National Grid has a DC pension plan which allows employee as well as Company contributions. Non-union employees hired after 1 January 2011, as well as most new hire represented union employees, receive a core contribution into the DC plan ranging from 3% to 9% of salary, irrespective of the employee's contribution into the plan. Most employees also receive a matching contribution that varies between 25% and 50% of employee contributions up to a maximum of 8% to 10%. The assets of the plans are held in trusts and administered by the RPC.

Defined benefit plans

National Grid sponsors four non-contributory qualified DB pension plans, which provide vested union employees, and vested non-union employees hired before 1 January 2011, with retirement benefits within prescribed limits as defined by the US Internal Revenue Service. National Grid also provides non-qualified DB pension arrangements for a section of current and former employees, which are closed to new entrants. Benefits under the DB plans generally reflect age, years of service and compensation, and are paid in the form of an annuity or lump sum. An independent actuary performs valuations annually. The Company funds the DB plans by contributing no less than the minimum amount required, but no more than the maximum tax-deductible amount allowed under US Internal Revenue Service regulations. The range of contributions determined under these regulations can vary significantly depending upon the funded status of the plans. At present, there is some flexibility in the amount that is contributed on an annual basis. In general, the Company's policy for funding the US pension plans is to contribute the amounts collected in rates and capitalised in the rate base during the year, to the extent that the funding is no less than the minimum amount required. For the current financial year, these contributions amounted to approximately £116 million (2021: £110 million).

25. Pensions and other post-retirement benefits continued

US other post-retirement benefits

National Grid provides healthcare and life insurance benefits to eligible employees, post-retirement. Eligibility is based on certain age and length of service requirements and, in most cases, retirees contribute to the cost of their healthcare coverage. In the US, there is no governmental requirement to pre-fund post-retirement healthcare and life insurance plans. However, in general, the Company's policy for funding the US retiree healthcare and life insurance plans is to contribute amounts collected in rates and capitalised in the rate base during the year. For the current financial year, these contributions amounted to £17 million (2021: £26 million).

For the last few years it has been the Company's policy to primarily direct contributions to the DB pension plans due to concerns over tax deductible limitations relating to the retiree and healthcare and life insurance plans.

Actuarial assumptions

On retirement, members of DB plans receive benefits whose value is dependent on factors such as salary and length of pensionable service. National Grid's obligation in respect of DB pension plans is calculated separately for each DB plan by projecting the estimated amount of future benefit payments that employees have earned for their pensionable service in the current and prior periods. These future benefit payments are discounted to determine the present value of the liabilities. Current service cost and any unrecognised past service cost are recognised immediately.

Advice is taken from independent actuaries relating to the appropriateness of the key assumptions applied, including life expectancy, expected salary and pension increases, and inflation. Comparatively small changes in the assumptions used may have a significant effect on the amounts recognised in the consolidated income statement, the consolidated statement of other comprehensive income and the net liability recognised in the consolidated statement of financial position. Remeasurements of pension assets and post-retirement benefit obligations are recognised in full in the period in which they occur in the consolidated statement of other comprehensive income.

The Company has applied the following financial assumptions in assessing DB liabilities:

	UK pensions			US pensions			US other post-retirement benefits		
	2022 %	2021 %	2020 %	**2022 %**	2021 %	2020 %	**2022 %**	2021 %	2020 %
Discount rate – past service	**2.78**	2.00	2.35	**3.65**	3.25	3.30	**3.65**	3.25	3.30
Discount rate – future service	**2.85**	2.15	2.35	**3.65**	3.25	3.30	**3.65**	3.25	3.30
Rate of increase in RPI – past service	**3.60**	3.15	2.65	**n/a**	n/a	n/a	**n/a**	n/a	n/a
Rate of increase in RPI – future service	**3.33**	3.00	2.45	**n/a**	n/a	n/a	**n/a**	n/a	n/a
Salary increases	**3.47**	3.40	2.90	**4.60**	4.30	3.50	**4.60**	4.30	3.50
Initial healthcare cost trend rate	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**6.80**	7.10	7.00
Ultimate healthcare cost trend rate	**n/a**	n/a	n/a	**n/a**	n/a	n/a	**4.50**	4.50	4.50

For UK pensions, single equivalent financial assumptions are shown above for presentational purposes, although full yield curves have been used in our calculations. The discount rate is determined by reference to high-quality UK corporate bonds at the reporting date. The rate of increase in salaries has been set using a promotional scale where appropriate. The rates of increases stated are not indicative of historical increases awarded or a guarantee of future increase, but merely an appropriate assumption used in assessing DB liabilities. Retail Price Index (RPI) is the key assumption that determines assumed increases in pensions in payment and deferment in the UK only.

Discount rates for US pension liabilities have been determined by reference to appropriate yields on high-quality US corporate bonds at the reporting date based on the duration of plan liabilities. The healthcare cost trend rate is expected to reach the ultimate trend rate by 2031 (2021: 2030).

The table below sets out the projected life expectancies adopted for the UK and US pension arrangements:

	UK pensions			US pensions		
	2022 years	2021 years	2020 years	**2022 years**	2021 years	2020 years
Assumed life expectations for a retiree age 65						
Males	**22.0**	21.8	22.1	**21.4**	21.6	20.9
Females	**23.8**	23.7	23.8	**23.6**	24.0	23.4
In 20 years:						
Males	**23.2**	23.1	23.3	**23.1**	23.2	22.5
Females	**25.2**	25.2	25.3	**25.3**	25.5	25.1

The weighted average duration of the DB obligation for each category of plan is 14 years for UK pension plans; 13 years for US pension plans and 15 years for US other post-retirement benefit plans. The table below summarises the split of DB obligations by status for each category of plan, with comparative figures for 2021.

	UK pensions		US pensions		US other post-retirement benefits	
	2022 %	2021 %	**2022 %**	2021 %	**2022 %**	2021 %
Active members	**16**	8	**36**	35	**34**	34
Deferred members	**10**	14	**9**	9	**—**	—
Pensioner members	**74**	78	**55**	56	**66**	66

For sensitivity analysis see note 35.

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Notes to the consolidated financial statements continued

25. Pensions and other post-retirement benefits continued

Amounts recognised in the consolidated statement of financial position

	2022 £m	2021 £m
Present value of funded obligations	**(23,541)**	(23,283)
Fair value of plan assets	**27,013**	24,388
	3,472	1,105
Present value of unfunded obligations	**(326)**	(324)
Other post-employment liabilities	**(71)**	(66)
Net defined benefit asset/(liability)	**3,075**	715
Represented by:		
Liabilities	**(810)**	(1,032)
Assets	**3,885**	1,747
	3,075	715

The geographical split of pensions and other post-retirement benefits is as shown below:

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Present value of funded obligations	**(14,197)**	(13,571)	**(6,531)**	(6,681)	**(2,813)**	(3,031)	**(23,541)**	(23,283)
Fair value of plan assets	**16,865**	14,680	**7,263**	6,909	**2,885**	2,799	**27,013**	24,388
	2,668	1,109	**732**	228	**72**	(232)	**3,472**	1,105
Present value of unfunded obligations	**(78)**	(74)	**(248)**	(250)	**—**	—	**(326)**	(324)
Other post-employment liabilities	**—**	—	**—**	—	**(71)**	(66)	**(71)**	(66)
Net defined benefit asset/(liability)	**2,590**	1,035	**484**	(22)	**1**	(298)	**3,075**	715
Represented by:								
Liabilities	**(78)**	(74)	**(248)**	(393)	**(484)**	(565)	**(810)**	(1,032)
Assets	**2,668**	1,109	**732**	371	**485**	267	**3,885**	1,747
	2,590	1,035	**484**	(22)	**1**	(298)	**3,075**	715

The recognition of the pension assets in the UK and in the US reflects legal and actuarial advice that we have taken regarding recognition of surpluses under IFRIC 14. In the UK, the Group has an unconditional right to a refund in the event of a winding up. In the US, surplus assets of a Plan may be used to pay for future benefits expected to be earned under that Plan.

25. Pensions and other post-retirement benefits continued

Amounts recognised in the income statement and statement of other comprehensive income

The expense or income arising from all Group retirement benefit arrangements recognised in the Group income statements is shown below:

	2022 £m	2021 £m	2020 £m
Included within operating costs			
Administration costs	**20**	18	16
Included within payroll costs			
Defined benefit plan costs:			
Current service cost	**223**	175	178
Past service cost – augmentations	**1**	—	—
Past service cost/(credit) – redundancies	**1**	(1)	—
Special termination benefit cost – redundancies	**9**	5	2
	234	179	180
Included within finance income and costs			
Net interest (income)/cost	**(2)**	38	23
Total included in income statement[1]	**252**	235	219
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[2]	**2,481**	1,408	(724)
Exchange adjustments	**7**	186	(97)
Total included in the statement of other comprehensive income[3]	**2,488**	1,594	(821)

1. Amounts shown in the table above include operating costs of £4 million (2021: £3 million; 2020: £4 million); payroll costs of £10 million (2021: £10 million; 2020: £10 million); and net interest income of £2 million (2021: £13 million; 2020: £11 million) presented within profit from discontinued operations. These amounts all relate to UK pensions.
2. For the year ended 31 March 2021, this included actuarial losses from the purchase of buy-in policies of £0.1 billion.
3. Amounts shown in the table above include remeasurements of pension assets and post-retirement benefit obligations resulting in a gain of £309 million (2021: £250 million loss; 2020: £58 million gain) presented within discontinued operations. These amounts all relate to UK pensions.

The geographical split of pensions and other post-retirement benefits is shown below:

	UK pensions			US pensions			US other post-retirement benefits		
	2022 £m	2021 £m	2020 £m	2022 £m	2021 £m	2020 £m	2022 £m	2021 £m	2020 £m
Included within operating costs									
Administration costs	**11**	9	9	**7**	7	6	**2**	2	1
Included within payroll costs									
Defined benefit plan costs:									
Current service cost	**83**	28	33	**101**	104	100	**39**	43	45
Past service cost – augmentations	**1**	—	—	**—**	—	—	**—**	—	—
Past service cost/(credit) – redundancies	**1**	(1)	—	**—**	—	—	**—**	—	—
Special termination benefit cost – redundancies	**9**	5	2	**—**	—	—	**—**	—	—
	94	32	35	**101**	104	100	**39**	43	45
Included within finance income and costs									
Net interest (income)/cost	**(7)**	(38)	(31)	**—**	35	21	**5**	41	33
Total included in income statement	**98**	3	13	**108**	146	127	**46**	86	79
Remeasurement gains/(losses) of pension assets and post-retirement benefit obligations[1]	**1,577**	(622)	143	**532**	1,017	(588)	**372**	1,013	(279)
Exchange adjustments	**—**	—	—	**11**	83	(42)	**(4)**	103	(55)
Total included in the statement of other comprehensive income	**1,577**	(622)	143	**543**	1,100	(630)	**368**	1,116	(334)

1. For the year ended 31 March 2021, UK pensions is stated after actuarial losses from the purchase of buy-in policies of £0.1 billion.

25. Pensions and other post-retirement benefits continued

Reconciliation of the net defined benefit asset/(liability)

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening net defined benefit asset/(liability)	**1,035**	1,520	**(22)**	(1,113)	**(298)**	(1,360)	**715**	(953)
Cost recognised in the income statement (including discontinued operations)	**(98)**	(3)	**(108)**	(146)	**(46)**	(86)	**(252)**	(235)
Remeasurement and foreign exchange effects recognised in the statement of other comprehensive income	**1,577**	(622)	**543**	1,100	**368**	1,116	**2,488**	1,594
Employer contributions	**167**	138	**116**	110	**17**	26	**300**	274
Other movements	**7**	2	**—**	—	**(29)**	(16)	**(22)**	(14)
Acquisition of WPD (note 37)	**566**	—	**—**	—	**—**	—	**566**	—
Reclassification to held for sale (note 10)	**(664)**	—	**(45)**	27	**(11)**	22	**(720)**	49
Closing net defined benefit asset/(liability)	**2,590**	1,035	**484**	(22)	**1**	(298)	**3,075**	715

Changes in the present value of defined benefit obligations (including unfunded obligations)

The table below shows the movement in defined benefit obligations across our DB plans over the year.

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening defined benefit obligations	**(13,645)**	(12,844)	**(6,931)**	(8,085)	**(3,031)**	(3,697)	**(23,607)**	(24,626)
Current service cost	**(83)**	(28)	**(101)**	(104)	**(39)**	(43)	**(223)**	(175)
Interest cost	**(88)**	(296)	**(240)**	(243)	**(100)**	(112)	**(428)**	(651)
Actuarial (losses)/gains – experience	**(627)**	(21)	**(24)**	(72)	**107**	216	**(544)**	123
Actuarial gains/(losses) – demographic assumptions	**133**	(1)	**100**	—	**71**	—	**304**	(1)
Actuarial gains/(losses) – financial assumptions	**1,387**	(1,181)	**329**	(62)	**192**	(25)	**1,908**	(1,268)
Past service (cost)/credit – redundancies	**(1)**	1	**—**	—	**—**	—	**(1)**	1
Special termination benefit cost – redundancies	**(9)**	(5)	**—**	—	**—**	—	**(9)**	(5)
Past service cost – augmentations	**(1)**	—	**—**	—	**—**	—	**(1)**	—
Medicare subsidy received	**—**	—	**—**	—	**(24)**	(25)	**(24)**	(25)
Employee contributions	**(8)**	(1)	**—**	—	**—**	—	**(8)**	(1)
Benefits paid	**919**	731	**403**	371	**159**	144	**1,481**	1,246
Exchange adjustments	**—**	—	**(327)**	804	**(140)**	362	**(467)**	1,166
Acquisition of WPD	**(7,096)**	—	**—**	—	**—**	—	**(7,096)**	—
Reclassification to held for sale	**4,844**	—	**12**	460	**(8)**	149	**4,848**	609
Closing defined benefit obligations	**(14,275)**	(13,645)	**(6,779)**	(6,931)	**(2,813)**	(3,031)	**(23,867)**	(23,607)

25. Pensions and other post-retirement benefits continued

Changes in the value of plan assets

The table below shows the movement in pension assets across our DB plans over the year.

	UK pensions		US pensions		US other post-retirement benefits		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
Opening fair value of plan assets	14,680	14,364	6,909	6,972	2,799	2,412	24,388	23,748
Interest income	95	334	240	208	95	71	430	613
Return on plan assets in excess of interest[1]	684	581	127	1,151	2	822	813	2,554
Administration costs	(11)	(9)	(7)	(7)	(2)	(2)	(20)	(18)
Employer contributions	167	138	116	110	17	26	300	274
Employee contributions	8	1	—	—	—	—	8	1
Benefits paid	(912)	(729)	(403)	(371)	(159)	(144)	(1,474)	(1,244)
Exchange adjustments	—	—	338	(721)	136	(259)	474	(980)
Acquisition of WPD	7,662	—	—	—	—	—	7,662	—
Reclassification to held for sale	(5,508)	—	(57)	(433)	(3)	(127)	(5,568)	(560)
Closing fair value of plan assets	16,865	14,680	7,263	6,909	2,885	2,799	27,013	24,388
Actual return on plan assets	779	915	367	1,359	97	893	1,243	3,167
Expected contributions to plans in the following year	146	93	74	113	14	6	234	212

1. For the year ended 31 March 2021, this included actuarial losses from the purchase of buy-in policies of £0.1 billion.

Asset allocations

The allocation of assets by asset class is set out below. Within these asset allocations there is significant diversification across regions, asset managers, currencies and bond categories.

UK pensions

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	1,458	474	1,932	555	801	1,356	732	732	1,464
Corporate bonds	2,741	—	2,741	3,730	37	3,767	3,837	—	3,837
Government securities	786	—	786	1,836	—	1,836	2,051	—	2,051
Property	122	1,002	1,124	104	565	669	103	585	688
Diversified alternatives	1,334	432	1,766	—	712	712	—	893	893
Liability-matching assets	2,023[1]	6,090[2]	8,113[3]	1,731[1]	4,133[2]	5,864[3]	1,704[1]	3,278[2]	4,982[3]
Longevity swap	—	(80)	(80)	—	(64)	(64)	—	(51)	(51)
Cash and cash equivalents	477	—	477	34	250	284	29	222	251
Other (including net current assets and liabilities)	16	(10)	6	—	256	256	—	249	249
	8,957	7,908	16,865[4]	7,990	6,690	14,680	8,456	5,908	14,364

1. Consists of pooled funds which invest mainly in fixed interest securities.
2. Includes buy-in policies held by NGUKPS with a total value of £2.7 billion (2021: £4.1 billion; 2020: £3.3 billion).
3. Included within liability-matching assets above is £6.6 billion (2021: £2.5 billion; 2020: £2.8 billion) of repurchase agreements. These are used to increase the market exposure of the liability-matching portfolios.
4. The fair value of plan assets for NGUKPS Section A includes £32 million (2021: £nil; 2020: £nil) of direct holdings in WPD debt instruments.

25. Pensions and other post-retirement benefits continued

US pensions

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	272	1,904	2,176	560	2,359	2,919	467	2,043	2,510
Corporate bonds	2,311	697	3,008	1,547	507	2,054	1,640	518	2,158
Government securities	335	715	1,050	354	527	881	535	732	1,267
Property	—	295	295	—	264	264	—	307	307
Diversified alternatives	142	364	506	167	458	625	162	464	626
Infrastructure	—	182	182	—	130	130	—	121	121
Cash and cash equivalents	31	—	31	24	—	24	24	—	24
Other (including net current assets and liabilities)	12	3	15	12	—	12	(44)	3	(41)
	3,103	4,160	7,263	2,664	4,245	6,909	2,784	4,188	6,972

US other post-retirement benefits

	2022			2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	185	1,013	1,198	419	1,303	1,722	353	1,037	1,390
Corporate bonds	723	2	725	13	—	13	15	—	15
Government securities	511	2	513	533	3	536	551	1	552
Diversified alternatives	144	120	264	185	172	357	162	161	323
Other[1]	—	185	185	—	171	171	—	132	132
	1,563	1,322	2,885	1,150	1,649	2,799	1,081	1,331	2,412

1. Other primarily comprises insurance contracts.

Main defined benefit risks

National Grid underwrites the financial and demographic risks associated with our DB plans. Although the governing bodies have sole responsibility for setting investment strategies and managing risks, National Grid closely works with and supports the governing bodies of each plan, to assist them in mitigating the risks associated with their plans and to ensure that the plans are funded to meet their obligations.

The most significant risks associated with the DB plans are:

Main risks	Description and mitigation
Investment risk	The plans invest in a variety of asset classes, with actual returns likely to differ from the underlying discount rate adopted, impacting on the funding position of the plan through the net balance sheet asset or liability. Each plan seeks to balance the level of investment return required with the risk that it can afford to take, to design the most appropriate investment portfolio.
Changes in bond yields	Liabilities are calculated using discount rates set with reference to the yields in high-quality bonds prevailing in the UK and US debt markets and will fluctuate as yields change. Volatility of the net balance sheet asset or liability is controlled through liability-matching strategies. The investment strategies allow for the use of synthetic as well as physical assets to be used to hedge interest rate risk.
Inflation risk	Changes in inflation will affect the current and future pensions but are partially mitigated through investing in inflation-matching assets and hedging instruments as well as bulk annuity buy-in policies. The investment strategies allow for the use of synthetic as well as physical assets to be used to hedge inflation risk.
Member longevity	Longevity is a key driver of liabilities and changes in life expectancy have a direct impact on liabilities. Improvements in life expectancy will lead to pension payments being paid for longer than expected and benefits ultimately being more expensive. This risk has been partly mitigated by recent scheme investment transactions including a longevity insurance contract (longevity swap) for NGEG of ESPS and two buy-in policies for Section A of NGUKPS.
Counterparty risk	This is managed by having a diverse range of counterparties and through having a strong collateralisation process (including for the longevity swap held by NGEG of ESPS). Measurement and management of counterparty risk is delegated to the relevant investment managers. For our bulk annuity policies, various termination provisions were introduced in the contracts, managing our exposure to counterparty risk. The insurers' operational performance and financial strength are monitored on a regular basis.
Default risk	Investments are predominantly made in regulated markets in assets considered to be of investment grade. Where investments are made either in non-investment grade assets or outside of regulated markets, investment levels are kept to prudent levels and subject to agreed control ranges, to control the risk.
Liquidity risk	The pension plans hold sufficient cash to meet benefit requirements, with other investments being held in liquid or realisable assets to meet unexpected cash flow requirements. The plans do not borrow money, or act as guarantor, to provide liquidity to other parties (unless it is temporary).
Currency risk	Fluctuations in the value of foreign denominated assets due to exposure to currency exchange rates is managed through a combination of segregated currency hedging overlay and currency hedging carried out by some of the investment managers.

25. Pensions and other post-retirement benefits continued

DB plan investment strategies

The Trustees and RPC, after taking advice from professional investment advisors and in consultation with National Grid, set their key principles, including expected returns, risk and liquidity requirements. They formulate an investment strategy to manage risk through diversification, taking into account expected contributions, maturity of the pension liabilities, and in the UK, the strength of the covenant. These strategies allocate investments between return-seeking assets such as equities and property, and liability-matching assets such as buy-in policies, government securities and corporate bonds which are intended to protect the funding position.

The approximate investment allocations for our plans at 31 March 2022 are as follows:

	UK pensions %	US pensions %	US other post-retirement benefits %
Return-seeking assets	28	41	51
Liability-matching assets	72	59	49

The governing bodies can generally delegate responsibility for the selection of specific bonds, securities and other investments to appointed investment managers. Investment managers are selected based on the required skills, expertise in those markets, process and financial security to manage the investments. Their performance is regularly reviewed against measurable objectives, consistent with each pension plan's long-term objectives and accepted risk levels.

In the UK, each of our pension plans has Responsible Investment (RI) Policies, which take into account Environmental, Social and Governance (ESG) factors and generally incorporate the six UN-backed Principles for Responsible Investment (UNPRI). Each of the Trustee boards believes that ESG factors can be material to financial outcomes and should therefore be considered alongside other factors. They recognise that their primary responsibility remains a fiduciary one, i.e., their first duty is to ensure the best possible return on investments with the appropriate level of risk. However, they also recognise the increasing materiality of ESG factors and that they have a fiduciary and regulatory duty to consider RI, including ESG factors and their potential impact on the quality and sustainability of long-term investment returns. The principle defined contribution arrangement in the UK, the NGUKRP, is operated by Legal & General, which embeds ESG factors in the investment options offered to members. As well as offering a range of self-select ethical funds, it directly incorporates its Climate Impact Pledge into the default investment option, which acts to align the fund to a carbon net zero future.

Whilst in the US there is no regulatory requirement to have ESG-specific principles embedded in investment policies, our investment managers often utilise ESG principles to inform their decision-making process.

26. Provisions

Provisions are recognised when an obligation exists resulting from a past event, and it is probable that cash will be paid to settle it, but the exact amount of cash required can only be estimated. The majority of our provisions relate to environmental remediation, specifically in relation to certain Superfund sites in the US, being sites we own or have owned in the past where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York. We also recognise provisions for decommissioning costs for various assets we would be required to remove at the end of their lives; the costs associated with restructuring plans; the costs in respect of insured past events; for certain Ofgem arrangements in respect of specific interconnectors which require the return of excess revenues above a cap; and for lease contracts we have entered into that are now loss-making.

In determining the quantum of the provision we recognise, we make estimates in relation to management's best judgement of the evaluation of the likelihood and the probability of exposure to potential loss, and the costs that would be incurred. Should circumstances change following unforeseeable developments, the likelihood or quantum could alter.

Provisions are recognised where a legal or constructive obligation exists at the reporting date, as a result of a past event, where the amount of the obligation can be reliably estimated and where the outflow of economic benefit is probable.

The quantum of the provision recognised for decommissioning, environmental, restructuring and other costs is based on estimated future expenditure, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment. Provisions to decommission significant portions of our regulated transmission and distribution assets are not recognised where no legal obligations exist, and a realistic alternative exists to incurring costs to decommission assets at the end of their life. In any case, even if a legal or constructive obligation did exist, it is not currently determinable when remediation work would take place and therefore no provision would be recorded at this point.

Changes in the provision arising from revised estimates, discount rates or changes in the expected timing of expenditure that relates to property, plant and equipment are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated useful economic lives; otherwise such changes are recognised in the income statement.

The unwinding of the discount is included within the income statement within finance costs.

	Environmental £m	Decommissioning £m	Restructuring £m	Other £m	Total provisions £m
At 1 April 2020	2,071	254	35	294	2,654
Exchange adjustments	(185)	(9)	(1)	(21)	(216)
Additions	26	42	11	67	146
Unused amounts reversed	(38)	(27)	—	(16)	(81)
Unwinding of discount	66	7	—	5	78
Utilised	(161)	(16)	(19)	(62)	(258)
Reclassification to held for sale (note 10)	(79)	(7)	—	(10)	(96)
At 31 March 2021	1,700	244	26	257	2,227
Exchange adjustments	82	4	1	10	97
Additions	158	37	16	212	423
Acquisition of WPD (note 37)	—	37	—	29	66
Unused amounts reversed	(25)	(4)	(1)	(31)	(61)
Unwinding of discount	64	6	—	3	73
Utilised	(99)	(26)	(22)	(47)	(194)
Reclassification to held for sale (note 10)	(3)	(40)	(3)	(46)	(92)
At 31 March 2022	**1,877**	**258**	**17**	**387**	**2,539**

	2022 £m	2021 £m
Current	**240**	260
Non-current	**2,299**	1,967
	2,539	2,227

26. Provisions continued

Environmental provisions

The environmental provision represents the estimated restoration and remediation costs relating to a number of sites owned and managed by subsidiary undertakings, together with certain US sites that National Grid no longer owns. The environmental provision is as follows:

	2022			2021		
	Discounted £m	Real undiscounted £m	Real discount rate	Discounted £m	Real undiscounted £m	Real discount rate
UK sites	152	160	0.5%	167	171	0.5%
US sites	1,725	1,789	0.5%	1,533	1,583	0.5%
	1,877	1,949		1,700	1,754	

The remediation expenditure in the UK relates to old gas manufacturing sites and also to electricity transmission sites. Cash flows are expected to be incurred until 2069. A number of estimation uncertainties affect the calculation of the provision, including the impact of regulation, the accuracy of site surveys, unexpected contaminants, transportation costs, the impact of alternative technologies, the expected timing and duration of cash flows, and changes in the real discount rate. This provision incorporates our best estimate of the financial effect of these uncertainties, but future changes in any of the assumptions could materially impact the calculation of the provision. The undiscounted amount is the undiscounted best estimate of the liability having regard to these uncertainties.

The remediation expenditure in the US is expected to be incurred until 2069, of which the majority relates to three Superfund sites (being sites where hazardous substances are present as a result of the historic operations of manufactured gas plants in Brooklyn, New York). The weighted average duration of the cash flows is 11 years. The uncertainties regarding the calculation of this provision are similar to those considered in respect of UK sites. Under the terms of our rate plans, we are entitled to recovery of environmental clean-up costs from rate payers.

Decommissioning provisions

The decommissioning provisions include £258 million (2021: £244 million) of expenditure relating to asset retirement obligations estimated to be incurred until 2104.

Restructuring provisions

In 2022, we continued to undertake design and implementation activities in respect of our new operating model and cost efficiency programme, which resulted in the recognition of an increased provision of £16 million in the year (2021: £11 million). The income statement expense relating to the provision has been treated as an exceptional item, and details are provided in note 5.

Other provisions

Included within other provisions at 31 March 2022 are the following amounts:

- £163 million (2021: £166 million) of estimated liabilities in respect of past events insured by insurance subsidiary undertakings, including employer liability claims. In accordance with insurance industry practice, these estimates are based on experience from previous years, but we currently expect that cash flows will be incurred until 2037;
- £121 million (2021: £nil) of estimated liabilities in respect of interconnector excess revenues which will be repayable in future reporting periods in accordance with the cap and floor regime constructed by Ofgem (see notes 3 and 38). These estimates are based on the respective interconnectors' performance against their cumulative caps and cash outflows will be required to settle these liabilities by the financial year ending 31 March 2028;
- £28 million (2021: £27 million) in respect of onerous lease commitments and rates payable on surplus properties with expenditure expected to be incurred until 2039; and
- £26 million (2021: £13 million) in respect of emissions provisions with expenditure expected to be incurred until 2023.

27. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of treasury shares the Company holds, which are shares that the Company has bought itself, predominantly to actively manage scrip issuances and settle employee share option and reward plan liabilities.

Share capital is accounted for as an equity instrument. An equity instrument is any contract that includes a residual interest in the consolidated assets of the Company after deducting all its liabilities and is recorded at the proceeds received, net of direct issue costs, with an amount equal to the nominal amount of the shares issued included in the share capital account and the balance recorded in the share premium account.

	Allotted, called-up and fully paid	
	million	£m
At 1 April 2020	3,780	470
Issued during the year in lieu of dividends[1]	35	4
At 31 March 2021	3,815	474
Issued during the year in lieu of dividends[1]	89	11
At 31 March 2022	**3,904**	**485**

1. The issue of shares under the scrip dividend programme is considered to be a bonus issue under the terms of the Companies Act 2006, and the nominal value of the shares is charged to the share premium account.

The share capital of the Company consists of ordinary shares of $12\frac{204}{473}$ pence nominal value each including ADSs. The ordinary shares and ADSs allow holders to receive dividends and vote at general meetings of the Company. The Company holds treasury shares but may not exercise any rights over these shares including the entitlement to vote or receive dividends. There are no restrictions on the transfer or sale of ordinary shares.

In line with the provisions of the Companies Act 2006, the Company has amended its Articles of Association and ceased to have authorised share capital.

The Company has implemented a share forfeiture programme following the completion of a tracing and notification exercise to any shareholders who have not had contact with the Company over the past 12 years, in accordance with the provisions set out in the Company's Articles of Association. Under the share forfeiture programme, the shares and dividends associated with shares of untraced members have been forfeited, with the resulting proceeds transferred to the Company to use in line with the Company's corporate responsibility strategy. During the financial year, the Company received £16 million of proceeds from the sale of untraced shares and derecognised £32 million of liabilities related to unclaimed dividends, which are reflected in share premium and the income statement respectively.

Treasury shares
At 31 March 2022, the Company held 259 million (2021: 266 million) of its own shares. The market value of these shares as at 31 March 2022 was £3,038 million (2021: £2,296 million).

For the benefit of employees and in connection with the operation of the Company's various share plans, the Company made the following transactions in respect of its own shares during the year ended 31 March 2022:

i. During the year, 4 million (2021: 4 million) treasury shares were gifted to National Grid Employee Share Trusts and 2 million (2021: 2 million) treasury shares were re-issued in relation to employee share schemes, in total representing approximately 0.2% (2021: 0.2%) of the ordinary shares in issue as at 31 March 2022. The nominal value of these shares was £1 million (2021: £1 million) and the total proceeds received were £17 million (2021: £17 million). National Grid settles share awards under its Long Term Incentive Plan and the Save As You Earn scheme, by the transfer of treasury shares to its employee share trusts.
ii. During the year, the Company made payments totalling £3 million (2021: £2 million) to National Grid Employee Share Trusts to enable the Trustees to make purchases of National Grid plc shares to settle share awards in relation to all employee share plans and discretionary reward plans. The cost of such purchases is deducted from retained earnings in the period that the transaction occurs.

The maximum number of ordinary shares held in treasury during the year was 266 million (2021: 272 million) representing approximately 6.8% (2021: 7.1%) of the ordinary shares in issue as at 31 March 2022 and having a nominal value of £33 million (2021: £34 million).

28. Other equity reserves

Other equity reserves are different categories of equity as required by accounting standards and represent the impact of a number of our historical transactions or fair value movements on certain financial instruments that the Company holds.

Other equity reserves comprise the translation reserve (see accounting policy C in note 1), cash flow hedge reserve and the cost of hedging reserve (see note 32), debt instruments at fair value through other comprehensive income reserve (FVOCI debt) and equity investments at fair value through other comprehensive income reserve (FVOCI equity) (see note 15), the capital redemption reserve and the merger reserve.

The merger reserve arose as a result of the application of merger accounting principles under the then prevailing UK GAAP, which under IFRS 1 was retained for mergers that occurred prior to the IFRS transition date. Under merger accounting principles, the difference between the carrying amount of the capital structure of the acquiring vehicle and that of the acquired business was treated as a merger difference and included within reserves. The merger reserve represents the difference between the carrying value of subsidiary undertaking investments and their respective capital structures following the Lattice demerger from BG Group plc and the 1999 Lattice refinancing.

The cash flow hedge reserve will amortise as the committed future cash flows from borrowings are paid or capitalised in fixed assets (as described in note 32). Cost of hedging, FVOCI debt and FVOCI equity reserves arose as a result of the adoption of IFRS 9 on 1 April 2018. See note 15 for further detail on FVOCI debt and FVOCI equity reserves; and note 32 in respect of cost of hedging reserve.

As the amounts included in other equity reserves are not attributable to any of the other classes of equity presented, they have been disclosed as a separate classification of equity.

	Translation £m	Cash flow hedge £m	Cost of hedging £m	FVOCI equity £m	FVOCI debt £m	Own credit £m	Capital redemption £m	Merger £m	Total £m
At 1 April 2019	750	61	17	34	48	13	19	(5,165)	(4,223)
Exchange adjustments[1]	560	—	—	—	—	—	—	—	560
Net losses taken to equity	—	(142)	(33)	(13)	(15)	(3)	—	—	(206)
Share of net losses of associates taken to equity	—	(5)	—	—	—	—	—	—	(5)
Transferred to profit or loss	—	14	(45)	—	—	—	—	—	(31)
Net losses in respect of cash flow hedging of capital expenditure	—	(17)	—	—	—	—	—	—	(17)
Tax	—	29	11	4	(2)	—	—	—	42
Cash flow hedges transferred to the statement of financial position, net of tax	—	(15)	—	—	—	—	—	—	(15)
At 1 April 2020	1,310	(75)	(50)	25	31	10	19	(5,165)	(3,895)
Exchange adjustments[1]	(1,345)	—	—	—	—	—	—	—	(1,345)
Net gains/(losses) taken to equity	—	14	11	36	80	(11)	—	—	130
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	1
Transferred to profit or loss	—	56	3	—	—	—	—	—	59
Net losses in respect of cash flow hedging of capital expenditure	—	(14)	—	—	—	—	—	—	(14)
Tax	—	(13)	8	(10)	—	2	—	—	(13)
Cash flow hedges transferred to the statement of financial position, net of tax	—	(17)	—	—	—	—	—	—	(17)
At 1 April 2021	(35)	(48)	(28)	51	111	1	19	(5,165)	(5,094)
Exchange adjustments[1]	629	—	—	—	—	—	—	—	629
Net losses taken to equity[2]	—	(96)	(2)	(70)	(11)	(1)	—	—	(180)
Share of net gains of associates taken to equity	—	1	—	—	—	—	—	—	1
Transferred to profit or loss	—	40	(1)	—	—	—	—	—	39
Net losses in respect of cash flow hedging of capital expenditure	—	(1)	—	—	—	—	—	—	(1)
Tax	—	11	2	19	3	—	—	—	35
Cash flow hedges transferred to the statement of financial position, net of tax	—	8	—	—	—	—	—	—	8
At 31 March 2022	**594**	**(85)**	**(29)**	**—**	**103**	**—**	**19**	**(5,165)**	**(4,563)**

1. The exchange adjustments recorded in the translation reserve comprise a gain of £754 million (2021: loss of £1,507 million; 2020: gain of £545 million) relating to the translation of foreign operations offset by a loss of £125 million (2021: gain of £183 million; 2020: gain of £5 million) relating to borrowings, cross-currency swaps and foreign exchange forward contracts used to hedge the net investment in non-sterling denominated subsidiaries.
2. In the year ended 31 March 2022, the Group disposed of its equity instruments related to shares held as part of a portfolio of financial instruments which back some long-term employee liabilities. The equity instruments were previously measured at FVOCI and prior to the disposal the Group recognised a gain of £12 million in the year. The accumulated gain and losses of £82 million recognised in other comprehensive income were transferred to retained earnings on disposal (see note 15).

29. Net debt

We define net debt as the amount of borrowings and financing derivatives less cash and current financial investments.

(a) Composition of net debt

Net debt is comprised as follows:

	2022 £m	2021 £m	2020 £m
Cash and cash equivalents (see note 20)	**204**	157	73
Current financial investments (see note 15)	**3,145**	2,342	1,998
Borrowings (see note 21)	**(45,465)**	(31,220)	(30,794)
Financing derivatives[1] (see note 17)	**(693)**	175	133
	(42,809)	(28,546)	(28,590)

1. The financing derivatives balance included in net debt excludes the commodity derivatives (see note 17).

(b) Analysis of changes in net debt

	Notes	Cash and cash equivalents £m	Financial investments[1] £m	Borrowings £m	Financing derivatives £m	Total[2] £m
At 1 April 2019		252	1,981	(28,730)	(32)	(26,529)
Impact of transition to IFRS 16		—	—	(474)	—	(474)
Cash flow		(183)	(42)	450	450	675
Fair value gains and losses		—	1	(57)	(246)	(302)
Foreign exchange movements		4	24	(807)	—	(779)
Interest income/(charges)	6	—	34	(1,092)	(39)	(1,097)
Other non-cash movements		—	—	(84)	—	(84)
At 1 April 2020		73	1,998	(30,794)	133	(28,590)
Cash flow		95	429	(2,336)	4	(1,808)
Fair value gains and losses		—	14	159	31	204
Foreign exchange movements		(7)	(106)	1,710	—	1,597
Interest income/(charges)	6	—	7	(946)	7	(932)
Other non-cash movements		—	—	(136)	—	(136)
Reclassification to held for sale	10	(4)	—	1,123	—	1,119
At 1 April 2021		157	2,342	(31,220)	175	(28,546)
Cash flow	29(c)	9	752	(9,993)	262	(8,970)
Fair value gains and losses		—	(12)	286	(604)	(330)
Foreign exchange movements		5	53	(652)	—	(594)
Interest income/(charges)	6	—	43	(1,177)	(59)	(1,193)
Other non-cash movements		—	(15)	34	—	19
Acquisition of WPD	37	44	69	(8,286)	26	(8,147)
Reclassification to held for sale[3]	10	(11)	(87)	5,543	(493)	4,952
At 31 March 2022		**204**	**3,145**	**(45,465)**	**(693)**	**(42,809)**
Balances at 31 March 2022 comprise:						
Non-current assets		—	—	—	264	264
Current assets		204	3,145	—	34	3,383
Current liabilities		—	—	(12,121)	(136)	(12,257)
Non-current liabilities		—	—	(33,344)	(855)	(34,199)
		204	**3,145**	**(45,465)**	**(693)**	**(42,809)**

1. Cash flows on current financial investments comprise £29 million (2021: £7 million; 2020: £35 million) of interest received and £781 million of cash outflows (2021: £436 million outflows; 2020: £7 million outflows) of net cash flow movements in short-term financial investments, as presented in the consolidated cash flow statement.
2. Includes accrued interest at 31 March 2022 of £351 million (2021: £263 million; 2020: £246 million).
3. Reclassification to held for sale represents the opening net debt position of the UK Gas Transmission business. The closing net debt position of the UK Gas Transmission business is disclosed in note 10.

29. Net debt continued

(c) Reconciliation of cash flow from liabilities within net debt to cash flow statement

	2022		2021[1]		2020[1]	
	Borrowings and other £m	**Financing derivatives £m**	Borrowings and other £m	Financing derivatives £m	Borrowings and other £m	Financing derivatives £m
Cash flows per financing activities section of cash flow statement:						
Proceeds received from loans	**12,347**	**—**	5,150	—	3,921	—
Repayment of loans	**(1,261)**	**—**	(1,654)	—	(3,037)	—
Payments of lease liabilities	**(117)**	**—**	(107)	—	(115)	—
Net movements in short-term borrowings	**(11)**	**—**	(619)	—	(562)	—
Cash inflows on derivatives	**—**	**20**	—	17	—	46
Cash outflows on derivatives	**—**	**(114)**	—	(183)	—	(245)
Interest paid	**(998)**	**(55)**	(711)	(42)	(802)	(65)
Cash flows per financing activities section of cash flow statement	**9,960**	**(149)**	2,059	(208)	(595)	(264)
Adjustments:						
Non-net debt-related items	**33**	**—**	29	—	34	—
Derivative cash (outflow)/inflow in relation to capital expenditure	**—**	**(8)**	—	10	—	13
Derivative cash inflows per investing section of cash flow statement	**—**	**17**	—	225	—	58
Derivative cash outflows per investing section of cash flow statement	**—**	**(122)**	—	(81)	—	(281)
Cash flows relating to financing liabilities within net debt	**9,993**	**(262)**	2,088	(54)	(561)	(474)
Analysis of changes in net debt:						
Borrowings	**9,993**	**—**	2,088	—	(561)	—
Financing derivatives	**—**	**(262)**	—	(54)	—	(474)
Cash flow movements relating to financing liabilities within net debt	**9,993**	**(262)**	2,088	(54)	(561)	(474)

1. Comparative amounts have been re-presented to reflect the classification of the UK Gas Transmission business as a discontinued operation. See notes 1 and 10 for further information.

(d) Reconciliation of changes in liabilities arising from financing activities

The table below reconciles changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. For the purposes of this table, the liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the consolidated cash flow statement within financing activities. As a result we have separately disclosed the reconciliation below, excluding derivatives associated with our net investment hedges and derivatives associated with the hedging of capital expenditure, given that they are both classified in the consolidated cash flow statement within investing activities.

	Notes	Borrowings £m	Financing derivatives £m	Total £m
At 1 April 2019		(28,730)	228	(28,502)
Impact of transition to IFRS 16		(474)	—	(474)
Cash flow[1]		450	240	690
Fair value gains and losses		(57)	(231)	(288)
Foreign exchange movements		(807)	—	(807)
Interest charges	6	(1,092)	(9)	(1,101)
Other non-cash movements		(84)	—	(84)
At 1 April 2020		(30,794)	228	(30,566)
Cash flow[1]		(2,336)	158	(2,178)
Fair value gains and losses		159	(301)	(142)
Foreign exchange movements		1,710	—	1,710
Interest charges	6	(946)	11	(935)
Other non-cash movements		(136)	—	(136)
Reclassification to held for sale	10	1,123	—	1,123
At 1 April 2021		(31,220)	96	(31,124)
Cash flow		(9,993)	149	(9,844)
Fair value gains and losses		286	(472)	(186)
Foreign exchange movements		(652)	—	(652)
Interest charges	6	(1,177)	(54)	(1,231)
Other non-cash movements		34	—	34
Acquisition of WPD	37	(8,286)	26	(8,260)
Reclassification to held for sale[2]	10	5,543	(495)	5,048
At 31 March 2022		**(45,465)**	**(750)**	**(46,215)**

1. Comparative amounts include financing cash flows attributable to the UK Gas Transmission business which was classified as a discontinued operation in the year (see notes 1 and 10). In order to reconcile financing cash flows to the consolidated cash flow statement for the years ended 31 March 2021 and 2020, cash flows from financing activities for both continuing operations and discontinued operations should be included, along with non-debt related items in note 29(c).
2. Reclassification to held for sale represents the opening net debt position of the UK Gas Transmission business. The closing net debt position of the UK Gas Transmission business is disclosed in note 10.

Notes to the consolidated financial statements continued

30. Commitments and contingencies

Commitments are those amounts that we are contractually required to pay in the future as long as the other party meets its obligations. These commitments primarily relate to energy purchase agreements and contracts for the purchase of assets which, in many cases, extend over a long period of time. We also disclose any contingencies, which include guarantees that companies have given, where we pledge assets against current obligations that will remain for a specific period.

Contingent assets are disclosed where the Group concludes that an inflow of economic benefits is probable.

	2022 £m	2021 £m
Future capital expenditure		
Contracted for but not provided[1]	**2,881**	2,716
Energy purchase commitments[2]		
Less than 1 year	**1,386**	1,255
In 1 to 2 years	**1,366**	894
In 2 to 3 years	**1,219**	975
In 3 to 4 years	**1,189**	959
In 4 to 5 years	**1,088**	896
More than 5 years	**12,266**	10,805
	18,514	15,784
Guarantees		
Guarantee of sublease for US property (expires 2040)	**149**	149
Guarantees of certain obligations of Grain LNG (expire up to 2025)	**31**	33
Guarantees of certain obligations for construction of HVDC West Coast Link (expected expiry 2059)	**84**	85
Guarantees of certain obligations of National Grid North Sea Link Limited (various expiry dates)	**569**	584
Guarantees of certain obligations of St William Homes LLP (various expiry dates)	**44**	53
Guarantees of certain obligations of National Grid IFA 2 Limited (expected expiry 2022)	**130**	170
Guarantees of certain obligations of National Grid Viking Link Limited (expected expiry 2024)	**1,177**	1,276
Other guarantees and letters of credit (various expiry dates)	**380**	486
	2,564	2,836

1. Included within future capital expenditure is £205 million (2021: £186 million) pertaining to the UK Gas Transmission business.
2. Energy purchase commitments relate to contractual commitments to purchase electricity or gas that are used to satisfy physical delivery requirements to our customers or for energy that we use ourselves (i.e. normal purchase, sale or usage) and hence are accounted for as ordinary purchase contracts (see note 32(f)). Details of commodity contract derivatives that do not meet the normal purchase, sale or usage criteria, and hence are accounted for as derivative contracts, are shown in note 17(b).

Through the ordinary course of our operations, we are party to various litigation, claims and investigations. We do not expect the ultimate resolution of any of these proceedings to have a material adverse effect on our results of operations, cash flows or financial position.

Contingent assets

In September 2021, a fire at the IFA interconnector station in Sellindge, Kent caused significant damage to infrastructure on site. This incident has resulted in claims under the Group's insurance policy for the rebuild cost of the damaged property and lost revenue arising from the business interruption. The Group believes that a favourable outcome is probable. However, the contingent asset has not been recognised as a receivable at 31 March 2022 because receipt of the amount is dependent on the outcome of the reinsurers formally agreeing liability and signing off on the investigation report. As at 31 March 2022, the investigation report is with the reinsurers for review and the final amount and timing of any insurance proceeds is not known with certainty.

The exceptional environmental insurance recovery described in note 5 is the result of one of a number of legal proceedings that are ongoing between the Group and insurance companies who have provided historic cover over sites which were environmentally impacted in the past. Following the resolution of that claim, the Group has reassessed the likelihood of recovery in other similar legal proceedings and now believes that it is more likely than not that one or more of them will be successful. However, legal proceedings in each case still have a number of stages to complete, including in certain cases court proceedings.

31. Related party transactions

Related parties include joint ventures, associates, investments and key management personnel.

The following significant transactions with related parties were in the normal course of business. Amounts receivable from and payable to related parties are due on normal commercial terms:

	2022 £m	2021 £m	2020 £m
Sales: Goods and services supplied to a pension plan	3	3	5
Sales: Goods and services supplied to joint ventures[1]	284	79	101
Sales: Goods and services supplied to associates[2]	—	1	33
Purchases: Goods and services received from joint ventures[3]	19	35	61
Purchases: Goods and services received from associates[3]	41	43	56
Receivable from joint ventures[4]	43	263	255
Receivable from associates	1	—	1
Payable to joint ventures[5]	247	17	—
Payable to associates	4	3	4
Interest income from joint ventures	—	—	2
Interest income from associates	—	—	8
Dividends received from joint ventures[6]	123	49	34
Dividends received from associates[7]	35	32	41

1. During the year, £74 million of sales were made to Emerald Energy Venture LLC (2021: £50 million; 2020: £21 million) and a further £7 million (2021: £6 million; 2020; £32 million) of sales were made to NGET/SPT Upgrades Limited. Prior to the Group's disposal of its equity interest in St William Homes LLP on 15 March 2022, a further £202 million (2021: £14 million; 2020: £38 million) of property sites were sold to St William Homes LLP.
2. In previous years, sales related to transactions with Quadgas, until the date it ceased to be a related party following the disposal of our 39% stake in June 2019 (see note 10) and included income of £31 million in 2020 relating to a Transitional Service Agreement following the sale of the UK Gas Distribution business to Quadgas.
3. During the year, the Group received goods and services from a number of US associates, both for the transportation of gas and for pipeline services in the US, most notably, £38 million (2021: £41 million; 2020: £31 million) of purchases from Millennium Pipeline Company LLC. The Group purchased assets of £18 million (2021: £17 million; 2020: £nil) from BritNed Development Limited. The Group also purchased assets of £0.3 million (2021: £5 million; 2020: £58 million) from NGET/SPT Upgrades Limited (a joint venture).
4. Amounts receivable from joint ventures include £33 million (2021: £19 million; 2020: £nil) from Emerald Energy Venture LLC. Amounts receivable in comparative periods include amounts due from St William Homes LLP, which is no longer a related party of the Group (2021: £241 million; 2020: £242 million).
5. Amounts payable to joint ventures include £223 million due to Bight Wind Holdings LLC, NGV's joint venture with RWE Renewables, in respect of a capital call to NGV following the successful auction of six seabed leases in New York.
6. Includes dividends of £39 million (2021: £18 million; 2020: £25 million) received from BritNed Development Limited and £77 million (2021: £25 million; 2020: £8 million) from Nemo Link Limited.
7. Includes dividends of £34 million (2021: £31 million; 2020: £32 million) received from Millennium Pipeline Company LLC.

Details of investments in principal subsidiary undertakings, joint ventures and associates are disclosed in note 34, and information relating to pension fund arrangements is disclosed in note 25. For details of Directors' and key management remuneration, refer to the Directors' Remuneration Report on pages 108 – 131 and note 4(c).

32. Financial risk management

Our activities expose us to a variety of financial risks including credit risk, liquidity risk, capital risk, currency risk, interest rate risk, inflation risk and commodity price risk. Our risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential volatility of financial performance from these risks. We use financial instruments, including derivative financial instruments, to manage these risks.

Risk management related to financing activities is carried out by a central treasury department under policies approved by the Finance Committee of the Board. The objective of the treasury department is to manage funding and liquidity requirements, including managing associated financial risks, to within acceptable boundaries. The Finance Committee provides written principles for overall risk management, and written policies covering the following specific areas: foreign exchange risk, interest rate risk, credit risk, liquidity risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity. The Finance Committee has delegated authority to administer the commodity price risk policy and credit policy for US-based commodity transactions to the Energy Procurement Risk Management Committee and the National Grid USA Board of Directors. Details of key activities in the current year are set out in the Finance Committee report on page 107.

We have exposure to the following risks, which are described in more detail below:
- credit risk;
- liquidity risk;
- currency risk;
- interest rate risk;
- commodity price risk; and
- capital risk.

Where appropriate, derivatives and other financial instruments used for hedging currency and interest rate risk exposures are formally designated as fair value, cash flow or net investment hedges as defined in IFRS 9. Hedge accounting allows the timing of the profit or loss impact of qualifying hedging instruments to be recognised in the same reporting period as the corresponding impact of hedged exposures. To qualify for hedge accounting, documentation is prepared specifying the risk management objective and strategy, the component transactions and methodology used for measurement of effectiveness.

32. Financial risk management continued

Hedge accounting relationships are designated in line with risk management activities further described below. The categories of hedging entered into are as follows:

- currency risk arising from our forecasted foreign currency transactions (capital expenditure or revenues) is designated in cash flow hedges;
- currency risk arising from our net investments in foreign operations is designated in net investment hedges; and
- currency and interest rate risk arising from borrowings are designated in cash flow or fair value hedges.

Critical terms of hedging instruments and hedged items are transacted to match on a 1:1 ratio by notional values. Hedge ineffectiveness can nonetheless arise from inherent differences between derivatives and non-derivative instruments and other market factors including credit, correlations, supply and demand, and market volatilities. Ineffectiveness is recognised in the remeasurements component of finance income and costs (see note 6). Hedge accounting is discontinued when a hedging relationship no longer qualifies for hedge accounting.

Certain hedging instrument components are treated separately as costs of hedging with the gains and losses deferred in a component of other equity reserves and released systematically into profit or loss to correspond with the timing and impact of hedged exposures, or released in full to finance costs upon an early discontinuation of a hedging relationship.

Refer to sections (c) currency risk and (d) interest rate risk below for further details on hedge accounting.

(a) Credit risk

We are exposed to the risk of loss resulting from counterparties' default on their commitments including failure to pay or make a delivery on a contract. This risk is inherent in our commercial business activities. Exposure arises from derivative financial instruments, deposits with banks and financial institutions, trade receivables and committed transactions with wholesale and retail customers.

Treasury credit risk

Counterparty risk arises from the investment of surplus funds and from the use of derivative financial instruments. As at 31 March 2022, the following limits were in place for investments and derivative financial instruments held with banks and financial institutions:

	Maximum limit £m	Long-term limit £m
Triple 'A' G7 sovereign entities (AAA)	2,708	2,031
Triple 'A' vehicles (AAA)	500	—
Triple 'A' range institutions and non-G7 sovereign entities (AAA)	2,462	1,847
Double 'A+' G7 sovereign entities (AA+)	2,462	1,847
Double 'A' range institutions (AA)	1,477 to 1,970	1,108 to 1,477
Single 'A' range institutions (A)	492 to 985	369 to 739

The maximum limit applies to all transactions, including long-term transactions. The long-term limit applies to transactions which mature in more than 12 months' time.

As at 31 March 2022 and 2021, we had a number of exposures to individual counterparties. In accordance with our treasury policies, counterparty credit exposure utilisations are monitored daily against the counterparty credit limits. Counterparty credit ratings and market conditions are reviewed continually with limits being revised and utilisation adjusted, if appropriate. Management does not expect any significant losses from non-performance by these counterparties. Further information on financial investments subject to impairment provisioning is included in note 15.

Commodity credit risk

The credit policy for US-based commodity transactions is owned by the Finance Committee to the Board, which establishes controls and procedures to determine, monitor and minimise the credit exposure to counterparties.

Wholesale and retail credit risk

Our principal commercial exposure in the UK is governed by the credit rules within the regulated codes: Uniform Network Code and Connection and Use of System Code. These set out the level of credit relative to the RAV for each credit rating. In the US, we are required to supply electricity and gas under state regulations. Our policies and practices are designed to limit credit exposure by collecting security deposits prior to providing utility services, or after utility services have commenced if certain applicable regulatory requirements are met. Collection activities are managed on a daily basis. Sales to retail customers are usually settled in cash, cheques, electronic bank payments or by using major credit cards. We are committed to measuring, monitoring, minimising and recording counterparty credit risk in our wholesale business. The utilisation of credit limits is regularly monitored, and collateral is collected against these accounts when necessary.

In March 2020, the Group's US distribution business temporarily ceased certain cash collection and termination activities in response to regulatory instructions following the COVID-19 pandemic. At the time this resulted in the recognition of expected credit losses. In the year ended 31 March 2022, collection activities resumed in New England and New York and are supported by certain government COVID funding programmes, which has been factored into the assessment of expected credit losses for the year (see note 19 for further details).

32. Financial risk management continued

(a) Credit risk continued

Offsetting financial assets and liabilities

The following tables set out our financial assets and liabilities which are subject to offset and to enforceable master netting arrangements or similar agreements. The tables show the amounts which are offset and reported net in the statement of financial position. Amounts which cannot be offset under IFRS, but which could be settled net under terms of master netting arrangements if certain conditions arise, and with collateral received or pledged, are shown to present National Grid's net exposure.

Financial assets and liabilities on different transactions would only be reported net in the balance sheet if the transactions were with the same counterparty, a currently enforceable legal right of offset exists, and the cash flows were intended to be settled on a net basis.

Amounts which do not meet the criteria for offsetting on the statement of financial position, but could be settled net in certain circumstances, principally relate to derivative transactions under ISDA agreements, where each party has the option to settle amounts on a net basis in the event of default of the other party.

Commodity contract derivatives that have not been offset on the balance sheet may be settled net in certain circumstances under ISDA or North American Energy Standards Board (NAESB) agreements.

For bank account balances and bank overdrafts, there are no 'Gross amounts offset' under cash pooling arrangements (2021: £nil). Our UK bank accounts for National Grid subsidiaries previously participated in GBP, EUR and USD Composite Accounting System overdraft facilities subject to offsetting gross and net overdraft limits. EUR and USD offsetting arrangements were discontinued in the prior year and GBP offsetting arrangements have no impact as at 31 March 2022. In the US, no offsetting arrangements exist, and cash transactions are settled through Service Company bank accounts with subsequent intercompany payables and receivables reported by subsidiaries with the Service Company.

The gross amounts offset for trade payables and receivables, which are subject to general terms and conditions, are insignificant.

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2022	**Gross carrying amounts £m**	**Gross amounts offset £m**	**Net amount presented in statement of financial position £m**	**Financial instruments £m**	**Cash collateral received/ pledged £m**	**Net amount £m**
Assets						
Financing derivatives	**298**	**–**	**298**	**(136)**	**(55)**	**107**
Commodity contract derivatives	**289**	**–**	**289**	**(8)**	**(50)**	**231**
	587	**–**	**587**	**(144)**	**(105)**	**338**
Liabilities						
Financing derivatives	**(991)**	**–**	**(991)**	**136**	**771**	**(84)**
Commodity contract derivatives	**(22)**	**–**	**(22)**	**8**	**3**	**(11)**
	(1,013)	**–**	**(1,013)**	**144**	**774**	**(95)**
	(426)	**–**	**(426)**	**–**	**669**	**243**

				Related amounts available to be offset but not offset in statement of financial position		
At 31 March 2021	Gross carrying amounts £m	Gross amounts offset £m	Net amount presented in statement of financial position £m	Financial instruments £m	Cash collateral received/ pledged £m	Net amount £m
Assets						
Financing derivatives	942	–	942	(234)	(561)	147
Commodity contract derivatives	57	–	57	(8)	–	49
	999	–	999	(242)	(561)	196
Liabilities						
Financing derivatives	(767)	–	(767)	234	467	(66)
Commodity contract derivatives	(132)	–	(132)	8	4	(120)
	(899)	–	(899)	242	471	(186)
	100	–	100	–	(90)	10

32. Financial risk management continued

(b) Liquidity risk

Our policy is to determine our liquidity requirements by the use of both short-term and long-term cash flow forecasts. These forecasts are supplemented by a financial headroom analysis which is used to assess funding requirements for at least a 24-month period and maintain adequate liquidity for a continuous 12-month period.

We believe our contractual obligations, including those shown in commitments and contingencies in note 30, can be met from existing cash and investments, operating cash flows and other financing that we reasonably expect to be able to secure in the future, together with the use of committed facilities if required.

Our debt agreements and banking facilities contain covenants, including those relating to the periodic and timely provision of financial information by the issuing entity, restrictions on disposals and financial covenants, such as restrictions on the level of subsidiary indebtedness and interest coverage. Failure to comply with these covenants, or to obtain waivers of those requirements, could in some cases trigger a right, at the lender's discretion, to require repayment of some of our debt and may restrict our ability to draw upon our facilities or access the capital markets.

The following is a payment profile of our financial liabilities and derivatives:

At 31 March 2022	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(11,589)	(1,322)	(2,468)	(28,119)	(43,498)
Interest payments on borrowings[1]	(970)	(928)	(883)	(12,525)	(15,306)
Lease liabilities	(132)	(96)	(79)	(366)	(673)
Other non-interest-bearing liabilities	(3,979)	(336)	—	—	(4,315)
Contingent consideration	(37)	(8)	—	—	(45)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,149	1,008	2,075	4,726	10,958
Financing derivatives – payments[2]	(3,401)	(1,189)	(2,336)	(5,468)	(12,394)
Commodity contract derivatives – receipts[2]	1	1	—	—	2
Commodity contract derivatives – payments[2]	(29)	2	(1)	—	(28)
Derivative financial assets					
Financing derivatives – receipts[2]	4,512	316	1,427	464	6,719
Financing derivatives – payments[2]	(4,405)	(282)	(1,313)	(405)	(6,405)
Commodity contract derivatives – receipts[2]	234	37	3	—	274
Commodity contract derivatives – payments[2]	(52)	(8)	(3)	—	(63)
	(16,698)	(2,805)	(3,578)	(41,693)	(64,774)

At 31 March 2021	Less than 1 year £m	1 to 2 years £m	2 to 3 years £m	More than 3 years £m	Total £m
Non-derivative financial liabilities					
Borrowings, excluding lease liabilities	(3,350)	(1,690)	(806)	(25,562)	(31,408)
Interest payments on borrowings[1]	(810)	(755)	(731)	(12,018)	(14,314)
Lease liabilities	(118)	(108)	(90)	(599)	(915)
Other non-interest-bearing liabilities	(3,207)	(350)	—	—	(3,557)
Contingent consideration	(40)	(24)	—	—	(64)
Derivative financial liabilities					
Financing derivatives – receipts[2]	3,773	749	451	4,326	9,299
Financing derivatives – payments[2]	(3,899)	(877)	(533)	(5,153)	(10,462)
Commodity contract derivatives – receipts[2]	12	—	—	—	12
Commodity contract derivatives – payments[2]	(83)	(23)	(14)	(12)	(132)
Derivative financial assets					
Financing derivatives – receipts[2]	2,162	926	833	1,789	5,710
Financing derivatives – payments[2]	(1,700)	(834)	(780)	(1,536)	(4,850)
Commodity contract derivatives – receipts[2]	21	4	1	1	27
Commodity contract derivatives – payments[2]	(21)	(4)	(2)	—	(27)
	(7,260)	(2,986)	(1,671)	(38,764)	(50,681)

1. The interest on borrowings is calculated based on borrowings held at 31 March without taking account of future issues. Floating rate interest is estimated using a forward interest rate curve as at 31 March. Payments are included on the basis of the earliest date on which the Company can be required to settle.
2. The receipts and payments line items for derivatives comprise gross undiscounted future cash flows, after considering any contractual netting that applies within individual contracts. Where cash receipts and payments within a derivative contract are settled net, and the amount to be received/(paid) exceeds the amount to be paid/(received), the net amount is presented within derivative receipts/(payments).

32. Financial risk management continued

(c) Currency risk

National Grid operates internationally with mainly pound sterling as the functional currency for the UK companies and US dollar for the US businesses. Currency risk arises from three major areas: funding activities, capital investment and related revenues, and holdings in foreign operations. This risk is managed using financial instruments including derivatives as approved by policy, typically cross-currency interest rate swaps, foreign exchange swaps and forwards.

Funding activities – our policy is to borrow in the most advantageous market available. Foreign currency funding gives rise to risk of volatility in the amount of functional currency cash to be repaid. This risk is reduced by swapping principal and interest back into the functional currency of the issuer. All foreign currency debt and transactions are hedged except where they provide a natural offset to assets elsewhere in the Group.

Capital investment and related revenues – capital projects often incur costs or generate revenues in a foreign currency, most often euro transactions done by the UK business. Our policy for managing foreign exchange transaction risk is to hedge contractually committed foreign currency cash flows over a prescribed minimum size, typically by buying euro forwards to hedge future expenditure, and selling euro forwards to hedge future revenues. For hedges of forecast cash flows our policy is to hedge a proportion of highly probable cash flows.

Holdings in foreign operations – we are exposed to fluctuations on the translation into pounds sterling of our foreign operations. The policy for managing this translation risk is to issue foreign currency debt or to replicate foreign debt using derivatives that pay cash flows in the currency of the foreign operation. The primary managed exposure arises from dollar denominated assets and liabilities held by our US operations, with a smaller euro exposure in respect of joint venture investments.

Derivative financial instruments were used to manage foreign currency risk as follows:

	2022					2021				
	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Cash and cash equivalents	111	—	93	—	204	63	—	94	—	157
Financial investments	1,725	—	1,420	—	3,145	1,215	—	1,127	—	2,342
Borrowings	(22,910)	(7,052)	(14,118)	(1,385)	(45,465)	(12,210)	(5,351)	(12,660)	(999)	(31,220)
Pre-derivative position	(21,074)	(7,052)	(12,605)	(1,385)	(42,116)	(10,932)	(5,351)	(11,439)	(999)	(28,721)
Derivative effect	(1,378)	6,849	(7,570)	1,406	(693)	(826)	5,459	(5,494)	1,036	175
Net debt position	(22,452)	(203)	(20,175)	21	(42,809)	(11,758)	108	(16,933)	37	(28,546)

The exposure to dollars largely relates to our net investment hedge activities and exposure to euros largely relates to hedges for our future non-sterling capital expenditure.

The currency exposure on other financial instruments is as follows:

	2022					2021				
	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m	Sterling £m	Euro £m	Dollar £m	Other £m	Total £m
Trade and other receivables	407	—	1,788	—	2,195	282	—	1,387	—	1,669
Trade and other payables	(1,459)	—	(2,554)	—	(4,013)	(1,207)	—	(1,878)	—	(3,085)
Other non-current liabilities	(90)	—	(253)	—	(343)	(77)	—	(288)	—	(365)

The carrying amounts of other financial instruments are denominated in the above currencies, which in most instances are the functional currency of the respective subsidiaries. Our exposure to dollars is due to activities in our US subsidiaries. We do not have any other significant exposure to currency risk on these balances.

Hedge accounting for currency risk

Where available, derivatives transacted for hedging are designated for hedge accounting. Economic offset is qualitatively determined because the critical terms (currency and volume) of the hedging instrument match the hedged exposure. If a forecast transaction was no longer expected to occur, the cumulative gain or loss previously reported in equity would be transferred to the income statement. This has not occurred in the current or comparative years.

Cash flow hedging of currency risk of capital expenditure and revenues is designated as hedging the exposure to movements in the spot translation rates only. The timing of forecasted transactions is not designated as a hedged risk. Gains and losses on hedging instruments arising from forward points and foreign currency basis spreads are excluded from designation and are recognised immediately in profit or loss, along with any hedge ineffectiveness. On recognition of the hedged purchase or sale in the financial statements, the associated hedge gains and losses, deferred in the cash flow hedge reserve in other equity reserves, are transferred out of reserves and included with the recognition of the underlying transaction. Where a non-financial asset or a non-financial liability results from a forecast transaction or firm commitment being hedged, the amounts deferred in reserves are included directly in the initial measurement of that asset or liability.

Net investment hedging is also designated as hedging the exposure to movements in spot translation rates only: spot-related gains and losses on hedging instruments are presented in the cumulative translation reserve within other equity reserves to offset gains or losses on translation of the hedged balance sheet exposure. Any ineffectiveness is recognised immediately in the income statement. Amounts deferred in the cumulative translation reserve with respect to net investment hedges are subsequently recognised in the income statement in the event of disposal of the overseas operations concerned. Any remaining amounts deferred in the cost of hedging reserve are also released to the income statement.

Hedges of foreign currency funding are designated as cash flow hedges or fair value hedges of forward exchange risk (hedging both currency and interest rate risk together, where applicable). Gains and losses arising from foreign currency basis spreads are excluded from designation and are treated as a cost of hedging, deferred initially in other equity reserves and released into profit or loss over the life of the hedging relationship. Hedge accounting for funding is described further in the interest rate risk section below.

32. Financial risk management continued

(d) Interest rate risk

National Grid's interest rate risk arises from our long-term borrowings. Our interest rate risk management policy is to seek to minimise total financing costs (being interest costs and changes in the market value of debt). Hedging instruments principally consist of interest rate and cross-currency swaps that are used to translate foreign currency debt into functional currency and to adjust the proportion of fixed-rate and floating-rate in the borrowings portfolio to within a range set by the Finance Committee of the Board. The benchmark interest rates hedged are currently based on LIBOR for USD and Sterling Overnight Index Average (SONIA) for GBP.

LIBOR is being replaced as an interest rate benchmark by alternative reference rates in certain currencies including our functional currencies, USD and GBP, and foreign currencies in which we operate. This impacts contracts including financial liabilities that pay LIBOR-based cash flows, and derivatives that receive or pay LIBOR-based cash flows. The change in benchmark also affects discount rates which will impact the valuations of certain liabilities. We have disclosed our exposure to LIBOR on our derivative portfolio in note 17, on our borrowings in note 21 and on our hedging arrangements in note 32(e). We are managing the risk by transitioning LIBOR cash flows to alternative reference rates on our affected contracts in line with the relevant jurisdictions. The migration project is underway, with all affected contracts where we previously paid or received GBP LIBOR amended in the year to 31 March 2022 (see note 21). The Finance Committee of the Board have delegated to the treasury department the authority to determine which benchmarks are the most appropriate. A combination of LIBOR and the successor benchmarks, primarily GBP SONIA and USD Secured Overnight Financing Rate (SOFR) will be used in the portfolio during the migration period.

We also consider inflation risk and hold some inflation-linked borrowings. We believe that these provide a partial economic offset to the inflation risk associated with our UK inflation-linked revenues.

The table in note 21 sets out the carrying amount, by contractual maturity, of borrowings that are exposed to interest rate risk before taking into account interest rate swaps.

Net debt was managed using derivative financial instruments to hedge interest rate risk as follows:

	2022					2021				
	Fixed rate £m	**Floating rate £m**	**Inflation linked £m**	**Other[1] £m**	**Total £m**	Fixed rate £m	Floating rate £m	Inflation linked £m	Other[1] £m	Total £m
Cash and cash equivalents	**82**	**118**	**—**	**4**	**204**	64	67	—	26	157
Financial investments	**—**	**3,107**	**—**	**38**	**3,145**	—	2,309	—	33	2,342
Borrowings	**(30,616)**	**(10,484)**	**(4,365)**	**—**	**(45,465)**	(23,163)	(1,762)	(6,295)	—	(31,220)
Pre-derivative position	**(30,534)**	**(7,259)**	**(4,365)**	**42**	**(42,116)**	(23,099)	614	(6,295)	59	(28,721)
Derivative effect	**2,860**	**(3,366)**	**(187)**	**—**	**(693)**	2,869	(2,511)	(183)	—	175
Net debt position	**(27,674)**	**(10,625)**	**(4,552)**	**42**	**(42,809)**	(20,230)	(1,897)	(6,478)	59	(28,546)

1. Represents financial instruments which are not directly affected by interest rate risk, such as investments in equity or other similar financial instruments.

Hedge accounting for interest rate risk

Borrowings paying variable or floating-rates expose National Grid to cash flow interest rate risk, partially offset by cash held at variable rates. Where a hedging instrument results in paying a fixed-rate, it is designated as a cash flow hedge because it has reduced the cash flow volatility of the hedged borrowing. Changes in the fair value of the derivative are initially recognised in other comprehensive income as gains or losses in the cash flow hedge reserve, with any ineffective portion recognised immediately in the income statement.

Borrowings paying fixed-rates expose National Grid to fair value interest rate risk. Where the hedging instrument pays a floating-rate, it is designated as a fair value hedge because it has reduced the fair value volatility of the borrowing. Changes in the fair value of the derivative and changes in the fair value of the hedged item in relation to the risk being hedged are both adjusted on the balance sheet and offset in the income statement to the extent the fair value hedge is effective, with the residual difference remaining as ineffectiveness.

Both types of hedges are designated as hedging the currency and interest rate risk arising from changes in forward points. Amounts accumulated in the cash flow hedge reserve (cash flow hedges only) and the deferred cost of hedging reserve (both cash flow and fair value hedges) are reclassified from reserves to the income statement on a systematic basis as hedged interest expense is recognised. Adjustments made to the carrying value of hedged items in fair value hedges are similarly released to the income statement to match the timing of the hedged interest expense.

When hedge accounting is discontinued, any remaining cumulative hedge accounting balances continue to be released to the income statement to match the impact of outstanding hedged items. Any remaining amounts deferred in the cost of hedging reserve are released immediately to the income statement as finance costs.

The Group early-adopted Phase I of IFRS Interest Rate Benchmark Reform amendments related to hedge accounting with effect from 1 April 2019, and Phase II with effect from 1 April 2020. The amendments impact our fair value hedging relationships where derivative cash flows will have been transitioned from paying LIBOR to paying an alternative reference rate. The hedged risk must be re-documented to reflect this, and allow existing hedge designations to continue unchanged during the period of uncertainty relating to the timing and method of benchmark migrations. This process has been completed for sterling LIBOR contracts but remains in progress for US dollar contracts.

The amendments will be applied until the earliest point in time of the Group's contracts that reference LIBOR being amended, the hedging relationship being formally discontinued or formal market conventions ending uncertainty being published and widely adopted. If amended cash flows do not cause a hedging relationship to be discontinued, then the amendments will cease to be applied only when that relationship is discontinued under IFRS 9.

The IFRS amendments impact fair value and cash flow hedges of interest rate risk and related hedging instruments, and certain net investment hedges that use cross-currency interest rate swaps to pay a foreign currency floating rate and receive a functional currency floating rate. The notional values of hedging instruments, for each type of hedging relationship impacted, are shown in the hedge accounting tables in note 32(e). These amounts also correspond to the exposures designated as hedged.

32. Financial risk management continued

(e) Hedge accounting

In accordance with the requirements of IFRS 7, certain additional information about hedge accounting is disaggregated by risk type and hedge designation type in the tables below:

Year ended 31 March 2022	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net gains/(losses) in respect of:				
Cash flow hedges	–	(103)	(1)	–
Cost of hedging	(7)	16	–	(7)
Transferred to profit or loss in respect of:				
Cash flow hedges	–	43	–	–
Cost of hedging	1	–	–	(2)
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(15)	(16)	–	(3)
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	–	–	1	10
Assets – non-current	49	67	1	82
Liabilities – current	(21)	(22)	(37)	(16)
Liabilities – non-current	(310)	(303)	(8)	–
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Jul 2022 – Sep 2044	Jun 2022 – Nov 2040	Apr 2022 – Feb 2027	Sep 2022 – Sep 2027
Spot foreign exchange range:				
GBP:USD	n/a	1.30 – 1.66	1.34 – 1.41	1.22 – 1.34
GBP:EUR	1.11 – 1.24	1.08 – 1.24	1.04 – 1.19	1.18
EUR:USD	1.13 – 1.17	1.13 – 1.15	n/a	n/a
Interest rate range:				
GBP	SONIA +84bps/+374bps	0.976% – 7.410%	n/a	n/a
USD	LIBOR +68bps/+115bps	2.095% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

32. Financial risk management continued

(e) Hedge accounting continued

Year ended 31 March 2021	Fair value hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency and interest rate risk £m	Cash flow hedges of foreign currency risk £m	Net investment hedges £m
Consolidated statement of comprehensive income				
Net losses in respect of:				
Cash flow hedges	—	14	(14)	—
Cost of hedging	(15)	(24)	—	50
Transferred to profit or loss in respect of:				
Cash flow hedges	—	56	—	—
Cost of hedging	1	2	—	—
Consolidated statement of changes in equity				
Other equity reserves – cost of hedging balances	(11)	(30)	—	6
Consolidated statement of financial position				
Derivatives – carrying value of hedging instruments[1]				
Assets – current	—	10	2	5
Assets – non-current	187	59	1	140
Liabilities – current	—	(12)	(24)	(17)
Liabilities – non-current	(113)	(255)	(22)	—
Profiles of the significant timing, price and rate information of hedging instruments				
Maturity range	Jan 2023 – Jan 2043	Sep 2021 – Nov 2040	Apr 2021 – Feb 2027	Mar 2022 – Sep 2027
Spot foreign exchange range:				
GBP:USD	1.64	1.30 – 1.66	1.31 – 1.41	1.22 – 1.40
GBP:EUR	1.11 – 1.24	1.08 – 1.24	1.04 – 1.29	1.15 – 1.16
EUR:USD	1.13 – 1.17	1.13 – 1.14	n/a	n/a
Interest rate range:				
GBP	LIBOR +30bps/+408bps	0.976% – 5.845%	n/a	n/a
USD	LIBOR –68bps/+115bps	2.513% – 3.864%	n/a	n/a

1. The use of derivatives may entail a derivative transaction qualifying for more than one hedge type designation under IFRS 9. Therefore, the derivative amounts in the table above are grossed up by hedge type, whereas they are presented net at an instrument level in the statement of financial position.

32. Financial risk management continued

(e) Hedge accounting continued

The following tables show the effects of hedge accounting on financial position and year-to-date performance for each type of hedge. These tables also present notional values of hedging instruments (and equal hedged exposures) impacted by IFRS 9 Interest Rate Benchmark Reform amendments.

(i) Fair value hedges of foreign currency and interest rate risk on recognised borrowings:

As at 31 March 2022		**Balance of fair value hedge adjustments in borrowings**		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1,2]	**(3,362)**	**437**	**(55)**	**340**	**(301)**	**39**

1. The carrying value of the hedged borrowings is £2,966 million, of which £nil is current and £2,966 million is non-current.
2. Included within the hedging instrument notional balance is £2,556 million impacted by Interest Rate Benchmark Reform amendments with £806 million still to be transitioned.

As at 31 March 2021		Balance of fair value hedge adjustments in borrowings		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1,2]	(2,755)	121	(85)	153	(127)	26

1. The carrying value of the hedged borrowings was £2,714 million, of which £nil was current and £2,714 million was non-current.
2. Included within the hedging instrument notional balance was £2,679 million impacted by Interest Rate Benchmark Reform amendments.

(ii) Cash flow hedges of foreign currency and interest rate risk:

As at 31 March 2022		**Balance in cash flow hedge reserve**		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Foreign currency and interest rate risk on borrowings[1]	**(6,287)**	**(48)**	**–**	**74**	**(74)**	**–**
Foreign currency risk on forecasted cash flows	**(835)**	**(40)**	**1**	**18**	**(18)**	**–**

1. Included within the hedging instrument notional balance is £100 million impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2021		Balance in cash flow hedge reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Foreign currency and interest rate risk on borrowings[1]	(4,884)	(11)	(6)	(16)	16	–
Foreign currency risk on forecasted cash flows	(988)	(31)	3	17	(17)	–

1. Included within the hedging instrument notional balance was £176 million impacted by Interest Rate Benchmark Reform amendments.

(iii) Net investment hedges of foreign currency risk:

As at 31 March 2022		**Balance in translation reserve**		**Change in value used for calculating ineffectiveness**		
Hedge type	**Hedging instrument notional £m**	**Continuing hedges £m**	**Discontinued hedges £m**	**Hedged item £m**	**Hedging instrument £m**	**Hedge ineffectiveness £m**
Currency risk on foreign operations[1]	**(3,489)**	**(125)**	**(2,643)**	**125**	**(125)**	**–**

1. Included within the hedging instrument notional balance is £nil impacted by Interest Rate Benchmark Reform amendments.

As at 31 March 2021		Balance in translation reserve		Change in value used for calculating ineffectiveness		
Hedge type	Hedging instrument notional £m	Continuing hedges £m	Discontinued hedges £m	Hedged item £m	Hedging instrument £m	Hedge ineffectiveness £m
Currency risk on foreign operations[1]	**(2,786)**	**183**	**(2,826)**	**(183)**	**183**	**–**

1. Included within the hedging instrument notional balance was £nil impacted by Interest Rate Benchmark Reform amendments.

32. Financial risk management continued

(f) Commodity price risk

We purchase electricity and gas to supply our customers in the US and to meet our own energy needs. Substantially all our costs of purchasing electricity and gas for supply to customers are recoverable at an amount equal to cost. The timing of recovery of these costs can vary between financial periods leading to an under- or over-recovery within any particular year that can lead to large fluctuations in the income statement. We follow approved policies to manage price and supply risks for our commodity activities.

Our energy procurement risk management policy and delegations of authority govern our US commodity trading activities for energy transactions. The purpose of this policy is to ensure we transact within pre-defined risk parameters and only in the physical and financial markets where we or our customers have a physical market requirement. In addition, state regulators require National Grid to manage commodity risk and cost volatility prudently through diversified pricing strategies. In some jurisdictions we are required to file a plan outlining our strategy to be approved by regulators. In certain cases, we might receive guidance with regard to specific hedging limits.

Energy purchase contracts for the forward purchase of electricity or gas that are used to satisfy physical delivery requirements to customers, or for energy that the Group uses itself, meet the expected purchase or usage requirements of IFRS 9. They are, therefore, not recognised in the financial statements until they are realised. Disclosure of commitments under such contracts is made in note 30.

US states have introduced a variety of legislative requirements with the aim of increasing the proportion of our electricity that is derived from renewable or other forms of clean energy. Annual compliance filings regarding the level of Renewable Energy Certificates (and other similar environmental certificates) are required by the relevant department of utilities. In response to the legislative requirements, National Grid has entered into long-term, typically fixed-price, energy supply contracts to purchase both renewable energy and environmental certificates. We are entitled to recover all costs incurred under these contracts through customer billing.

Under IFRS, where these supply contracts are not accounted for as leases, they are considered to comprise two components, being a forward purchase of power at spot prices, and a forward purchase of environmental certificates at a variable price (being the contract price less the spot power price). With respect to our current contracts, neither of these components meets the requirement to be accounted for as a derivative. The environmental certificates are currently required for compliance purposes, and at present there are no liquid markets for these attributes. Accordingly, this component meets the expected purchase or usage exemption of IFRS 9. We expect to enter into an increasing number of these contracts, in order to meet our compliance requirements in the short to medium term. In future, if and when liquid markets develop, and to the extent that we are in receipt of environmental certificates in excess of our required levels, this exemption may cease to apply, and we may be required to account for forward purchase commitments for environmental certificates as derivatives at fair value through profit and loss.

32. Financial risk management continued

(g) Fair value analysis

Included in the statement of financial position are financial instruments which are measured at fair value. These fair values can be categorised into hierarchy levels that are representative of the inputs used in measuring the fair value. The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active, a valuation technique is used.

	2022				2021			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Assets								
Investments held at FVTPL	2,292	–	417	2,709	1,768	–	240	2,008
Investments held at FVOCI[1]	–	413	–	413	99	416	–	515
Financing derivatives	–	298	–	298	–	942	–	942
Commodity contract derivatives	–	238	51	289	–	12	45	57
	2,292	949	468	3,709	1,867	1,370	285	3,522
Liabilities								
Financing derivatives	–	(804)	(187)	(991)	–	(584)	(183)	(767)
Commodity contract derivatives	–	(15)	(7)	(22)	–	(75)	(57)	(132)
Liabilities held at fair value	–	–	–	–	(682)	–	–	(682)
Contingent consideration[2]	–	–	(41)	(41)	–	–	(57)	(57)
	–	(819)	(235)	(1,054)	(682)	(659)	(297)	(1,638)
	2,292	130	233	2,655	1,185	711	(12)	1,884

1. Investments held includes instruments which meet the criteria of IFRS 9 or IAS 19.
2. Contingent consideration relates to the acquisition of National Grid Renewables.

Level 1:	Financial instruments with quoted prices for identical instruments in active markets.
Level 2:	Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets, and financial instruments valued using models where all significant inputs are based directly or indirectly on observable market data.
Level 3:	Financial instruments valued using valuation techniques where one or more significant inputs are based on unobservable market data.

Our Level 1 financial investments and liabilities held at fair value are valued using quoted prices from liquid markets.

Our Level 2 financial investments held at fair value are valued using quoted prices for similar instruments in active markets, or quoted prices for identical or similar instruments in inactive markets. Alternatively, they are valued using models where all significant inputs are based directly or indirectly on observable market data.

Our Level 2 financing derivatives include cross-currency, interest rate and foreign exchange derivatives. We value these by discounting all future cash flows by externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties. These derivatives can be priced using liquidly traded interest rate curves and foreign exchange rates, and therefore we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 2 commodity contract derivatives include over-the-counter gas and power swaps as well as forward physical gas deals. We value our contracts based on market data obtained from the New York Mercantile Exchange (NYMEX) and the Intercontinental Exchange (ICE) where monthly prices are available. We discount based on externally sourced market yield curves at the reporting date, taking into account the credit quality of both parties and liquidity in the market. Our commodity contracts can be priced using liquidly traded swaps. Therefore, we classify our vanilla trades as Level 2 under the IFRS 13 framework.

Our Level 3 financing derivatives include inflation-linked swaps, where the market is illiquid. In valuing these instruments, we use in-house valuation models and obtain external valuations to support each reported fair value.

Our Level 3 commodity contract derivatives primarily consist of our forward purchases of electricity and gas that we value using proprietary models. Derivatives are classified as Level 3 where significant inputs into the valuation technique are neither directly nor indirectly observable (including our own data, which are adjusted, if necessary, to reflect the assumptions market participants would use in the circumstances).

Our Level 3 investments include equity instruments accounted for at fair value through profit and loss. These equity holdings are part of our corporate venture capital portfolio held by National Grid Partners and comprise a series of small unquoted investments where prices or valuation inputs are unobservable. These investments are either recently acquired or there have been recent funding rounds with third parties and therefore the valuation is based on the latest transaction price and any subsequent investment-specific adjustments.

Our Level 3 investments also include our investment in Sunrun Neptune 2016 LLC, which is accounted for at fair value through profit and loss. The investment is fair valued by discounting expected cash flows using a weighted average cost of capital specific to Sunrun Neptune 2016 LLC.

In light of the current ongoing impact of the COVID-19 pandemic, the valuations of certain assets and liabilities can be more subjective. While there have been significant movements in market indices, we are satisfied that there has been no significant impact on the fair values of our financial instruments measured at fair value, and that any impact is reflected in the fair values in the table above.

32. Financial risk management continued

(g) Fair value analysis continued

The changes in value of our Level 3 financial instruments are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]		Total	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
At 1 April	(183)	(235)	(12)	2	183	137	(12)	(96)
Net gains/(losses) for the year[1,2]	(4)	51	56	(16)	102	(2)	154	33
Purchases	–	–	17	(1)	93	32	110	31
Settlements	–	1	(17)	(1)	(2)	16	(19)	16
Reclassification to held for sale (note 10)	–	–	–	4	–	–	–	4
At 31 March	(187)	(183)	44	(12)	376	183	233	(12)

1. Loss of £4 million (2021: £51 million gain) is attributable to derivative financial instruments held at the end of the reporting period and has been recognised in finance costs in the income statement.
2. Gain of £27 million (2021: £46 million loss) is attributable to commodity contract derivative financial instruments held at the end of the reporting period.
3. Other comprises our investments in Sunrun Neptune 2016 LLC and the investments made by National Grid Partners, which are accounted for at fair value through profit and loss as well as the contingent consideration arising from the acquisition of National Grid Renewables.

The impacts on a post-tax basis of reasonably possible changes in significant Level 3 assumptions are as follows:

	Financing derivatives		Commodity contract derivatives		Other[3]	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
10% increase in commodity prices[1]	–	–	9	3	–	–
10% decrease in commodity prices[1]	–	–	(8)	(1)	–	–
+10% market area price change	–	–	–	(4)	–	–
-10% market area price change	–	–	–	7	–	–
+20 basis points change in Limited Price Inflation (LPI) market curve[2]	(84)	(83)	–	–	–	–
-20 basis points change in LPI market curve[2]	82	83	–	–	–	–
+50 basis points change in discount rate	–	–	–	–	(10)	(5)
-50 basis points change in discount rate	–	–	–	–	10	5

1. Level 3 commodity price sensitivity is included within the sensitivity analysis disclosed in note 35.
2. A reasonably possible change in assumption of other Level 3 derivative financial instruments is unlikely to result in a material change in fair values.
3. The investments acquired in the period were on market terms, and sensitivity is considered insignificant at 31 March 2022.

The impacts disclosed above were considered on a contract-by-contract basis with the most significant unobservable inputs identified.

32. Financial risk management continued

(h) Capital risk management

The capital structure of the Group consists of shareholders' equity, as disclosed in the consolidated statement of changes in equity, and net debt (note 29). National Grid's objectives when managing capital are: to safeguard our ability to continue as a going concern; to remain within regulatory constraints of our regulated operating companies; and to maintain an efficient mix of debt and equity funding thus achieving an optimal capital structure and cost of capital. We regularly review and manage the capital structure as appropriate in order to achieve these objectives.

Maintaining appropriate credit ratings for our operating and holding companies is an important aspect of our capital risk management strategy and balance sheet efficiency. We monitor our balance sheet efficiency using several metrics including retained cash flow/net debt (RCF/debt), regulatory gearing and interest cover. For the year ended 31 March 2022, these metrics for the Group were 8.9% (2021: 6.6%), 81% (2021: 65%) and 4.7x (2021: 4.5x), respectively – see pages 37 and 273 – 274. As expected, regulatory gearing at 31 March 2022 was higher than our long-run projections due to the fact that we are only part way through the transactions that make up our strategic pivot. Once the strategic pivot is complete, we expect to continue to generate strong cash flows and for regulatory gearing to decrease and to settle at slightly above 70%. As a result, and combined with the benefit of our hybrid debt, we expect gearing levels, and the other standard metrics we monitor, to be consistent with our current, strong investment grade, overall Group credit rating.

We monitor the RAV gearing within National Grid Electricity Transmission plc (NGET), WPD and the regulated transmission business within National Grid Gas plc (NGG) which became a discontinued operation in the period (see note 10). This is calculated as net debt expressed as a percentage of RAV, and indicates the level of debt employed to fund our UK regulated businesses. It is compared with the level of RAV gearing indicated by Ofgem as being appropriate for these businesses, at around 55% to 65%. We also monitor net debt as a percentage of rate base for our US operating companies, comparing this with the allowed rate base gearing inherent within each of our agreed rate plans, typically around 50%.

As part of the Group's debt financing arrangements, we are subject to a number of financial covenants associated with existing borrowings and facility arrangements:

- the requirement to maintain subsidiary indebtedness relating to non-US and US subsidiaries (excluding National Grid North America Inc.) limiting the total indebtedness in absolute terms to £35 billion for non-US Subsidiaries and $35 billion for US subsidiaries. As at 31 March 2022, headroom on these covenants exceeds £10 billion;
- The Articles of Association of National Grid plc limit Group total borrowings less cash and short-term investments in absolute terms to £55 billion. As at 31 March 2022 headroom on the limit exceeds £10 billion;
- Interest cover ratios relating to the WPD companies within the Group requiring a consolidated EBITDA to interest payable of not less than 3:1. These covenants range in outturn from 5:1 to 6:1 at the reporting date; and
- Net debt to RAV gearing covenants limiting gearing to 85% of RAV for each WPD operating company. As at 31 March 2022, actual gearing of less than 60% is reported for all impacted companies.

We consider the risk of breaching these covenants as remote given the level of headroom present.

The majority of our regulated operating companies in the US and the UK are subject to certain restrictions on the payment of dividends by administrative order, contract and/or licence. The types of restrictions that a company may have that would prevent a dividend being declared or paid unless they are met include:

- the requirement to notify by certification to regulators and certain lenders;
- dividends must be approved in advance by the relevant US state regulatory commission;
- the subsidiary must have one or two recognised rating agency credit ratings of at least investment grade depending on contractual requirements;
- dividends must be limited to cumulative retained earnings, including pre-acquisition retained earnings and in line with relevant company legislation;
- the securities of National Grid plc must maintain an investment grade credit rating, and if that rating is the lowest investment grade bond rating it cannot have a negative watch/review for downgrade notice by a credit rating agency;
- the subsidiary must not carry out any activities other than those permitted by the licences;
- the subsidiary must not create any cross-default obligations or give or receive any intra-group cross-subsidies;
- the percentage of equity compared with total capital of the subsidiary must remain above certain levels; and
- in the case of WPD, the percentage of debt compared with total RAV of the subsidiary must remain below 85%.

These restrictions are subject to alteration in the US as and when a new rate case or rate plan is agreed with the relevant regulatory bodies for each operating company and, in the UK, through the normal licence review process.

As most of our business is regulated, at 31 March 2022 the majority of our net assets are subject to some of the restrictions noted above. These restrictions are not considered to be significantly onerous, nor do we currently expect they will prevent the planned payment of dividends in future in line with our dividend policy.

All the above requirements are monitored on a regular basis in order to ensure compliance. The Group has complied with all externally imposed capital requirements to which it is subject.

33. Borrowing facilities

To support our liquidity requirements and provide backup to commercial paper and other borrowings, we agree committed credit facilities with financial institutions over and above the value of borrowings that may be required. These committed credit facilities are undrawn.

At 31 March 2022, we had bilateral committed credit facilities of £5,978 million (2021: £5,410 million). In addition, we had committed credit facilities from syndicates of banks of £936 million at 31 March 2022 (2021: £115 million). An analysis of the maturity of these undrawn committed facilities is shown below:

	2022 £m	2021 £m
Undrawn committed borrowing facilities expiring:		
Less than 1 year	–	–
In 1 to 2 years	936	1,668
In 2 to 3 years	4,373	534
In 3 to 4 years	1,605	1,718
In 4 to 5 years	–	1,605
More than 5 years	–	–
	6,914	5,525

Of the unused facilities at 31 March 2022, £6,823 million (2021: £5,410 million) is available for liquidity purposes, while £91 million (2021: £115 million) is available as backup to specific US borrowings. The increase in total facility positions reflects the increased size of the Group following the acquisition of WPD. £845 million of the undrawn syndicated facilities due to mature in one to two years were renegotiated between 1 April and 19 May 2022, with no uplift in the amount and a new expiry date of May 2025.

Included in the table above within three to four years is a facility of £350 million related to National Grid Gas plc, a company treated as held for sale.

In addition, we have the following facilities which are not included in the table above:

- for the separately regulated business of National Grid Electricity System Operator Limited, the Group has a facility of £550 million (2021: £550 million). This facility is not available as Group general liquidity support;
- the Group continues to have access to Export Credit Agreements (ECAs) funding specific projects totalling £1,396 million (2021: £1,345 million), of which £489 million (2021: £446 million) is undrawn; and
- the Group entered into a loan facility in relation to the acquisition of WPD (see note 37) of £8,250 million (31 March 2021: £8,250 million) to finance the consideration, of which £8,179 million has been drawn since the year end with no further drawdown available (31 March 2021: undrawn). The bridge facility allows for the extension of the facility maturity date up to September 2023 but includes a requirement that the proceeds of the planned sales of NECO and the UK Gas Transmission business are applied to repay the facility.

34. Subsidiary undertakings, joint ventures and associates

While we present consolidated results in these financial statements as if we were one company, our legal structure is such that there are a number of different operating and holding companies that contribute to the overall result. This structure has evolved through acquisitions as well as regulatory requirements to have certain activities within separate legal entities.

Subsidiary undertakings

A list of the Group's subsidiaries as at 31 March 2022 is given below. The entire share capital of subsidiaries is held within the Group except where the Group's ownership percentages are shown. These percentages give the Group's ultimate interest and therefore allow for the situation where subsidiaries are owned by partly owned intermediate subsidiaries. Where subsidiaries have different classes of shares, this is largely for historical reasons, and the effective percentage holdings given represent both the Group's voting rights and equity holding. Shares in National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc are held directly by National Grid plc. All other holdings in subsidiaries are owned by other subsidiaries within the Group. All subsidiaries are consolidated in the Group's financial statements.

Principal Group companies are identified in **bold**. These companies are incorporated and principally operate in the countries under which they are shown. All entities incorporated in the United States are taxed in the United States on their worldwide income other than where indicated in the footnotes below. Other entities are tax resident in their jurisdiction of incorporation other than where indicated in the footnotes below.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

Birch Sites Limited
Carbon Sentinel Limited
Central Networks Trustees Limited[1]
Droylsden Metering Services Limited
Gridcom Limited
Hyder Profit Sharing Trustees Limited[1]
Icelink Interconnector Limited
Kelston Properties 2 Limited[1]
Lattice Group Employee Benefit Trust Limited
Lattice Group Limited
Lattice Group Trustees Limited
Meter Operator Services Limited*[1]
Meter Reading Services Limited*[1]
Natgrid Limited
NatGrid One Limited[2]
NatgridTW1 Limited[2]
National Grid (US) Holdings Limited[2]
National Grid (US) Investments 2 Limited[2]
National Grid (US) Investments 4 Limited[2]
National Grid (US) Partner 1 Limited[2]
National Grid Carbon Limited
National Grid Commercial Holdings Limited
National Grid Distributed Energy Limited
National Grid Electricity Group Trustee Limited
National Grid Electricity System Operator Limited
National Grid Electricity Transmission plc
National Grid Energy Metering Limited
National Grid Gas Holdings Limited
National Grid Gas plc
National Grid Grain LNG Limited
National Grid Holdings Limited[2]
National Grid Holdings One plc
National Grid Hydrogen Limited
National Grid IFA 2 Limited
National Grid Interconnector Holdings Limited
National Grid Interconnectors Limited
National Grid International Limited[2]
National Grid Metering Limited
National Grid North Sea Link Limited
National Grid Offshore Limited
National Grid Partners Limited
National Grid Plus Limited
National Grid Property Holdings Limited
National Grid Smart Limited
National Grid Ten
National Grid Thirty Six Limited
National Grid Twelve Limited[2]
National Grid Twenty Eight Limited
National Grid Twenty Seven Limited
National Grid Twenty Three Limited[2]
National Grid UK Limited
National Grid UK Pension Services Limited
National Grid Ventures Limited
National Grid Viking Link Limited
National Grid William Limited
NG Nominees Limited
NGC Employee Shares Trustee Limited
NGG Finance plc
Ngrid Intellectual Property Limited
NGT Two Limited
Port Greenwich Limited
Sheet Road Management Company Limited (51%)[3]
South Wales Electricity Share Scheme Trustees Limited[1]
South Western Helicopters Limited[1]
Supergrid Electricity Limited
Supergrid Energy Transmission Limited
Supergrid Limited
Thamesport Interchange Limited
The National Grid Group Quest Trustee Company Limited
The National Grid YouPlan Trustee Limited
Transco Limited
Warwick Technology Park Management Company (No 2) Limited (60.56%)[4]
Western Power Distribution (East Midlands) plc[1]
Western Power Distribution (South Wales) plc[1]
Western Power Distribution (South West) plc[1]
Western Power Distribution (West Midlands) plc[1]
Western Power Distribution Holding Company Limited[1]
Western Power Distribution Investments Limited[1]
Western Power Distribution plc[1]
Western Power Generation Limited[1]
Western Power Pension Trustee Limited[1]
WPD Distribution Network Holdings Limited[1]
WPD Investment Holdings limited[1]
WPD Island Limited[1]
WPD Limited[1]
WPD Midlands Limited[1]
WPD Midlands Networks Contracting Limited*[1]
WPD Property Investments Limited[1]
WPD Share Scheme Trustees Limited[1]
WPD Smart Metering Limited[1]
WPD Telecoms Limited[1]
WPD WEM Holdings Limited[1]
WPD WEM Limited[1]
WW Share Scheme Trustees Limited[1]

1. Registered office: Avonbank, Feeder Road, Bristol, Avon, BS2 0TB.
2. Companies where National Grid plc has issued guarantees over the liabilities of the companies as at 31 March 2022 and for which the companies are taking the exemption from the requirements of an audit for their individual financial statements as permitted by section 479A of the Companies Act.
3. Registered office: Netley Old Hall Farm, Dorrington, Shrewsbury, United Kingdom, SY5 7JY.
4. Registered office: Shire Hall, PO Box 9, Warwick CV34 4RL, UK.

* In process of strike-off.

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in the US

Registered office: National Registered Agents, Inc., 1209 Orange Street, Wilmington, DE 19801, USA (unless stated otherwise in footnotes).

Apple River Solar, LLC
Armenia Solar, LLC
Ashland Solar, LLC
Athens Solar, LLC
Autauga Solar, LLC
Banner Solar, LLC
Bazile Creek Wind Farm, LLC
Bee Hollow Solar, LLC
Bell Plaine Solar, LLC
Benevolent Solar, LLC
Blaze Solar, LLC[1]
Blevins Solar, LLC
Blue Ridge Wind, LLC
Blue Spring Solar, LLC
Blues Solar, LLC
Bluewater Solar, LLC
Boone Solar, LLC
Boston Gas Company[2]
Bridges Solar, LLC
British Transco Capital, Inc.[3]
British Transco Finance, Inc.[3]
Brock Solar, LLC
Broken Bridge Corp.[4]
Brook Trout Solar, LLC
Burley Solar, LLC
Burlington Solar, LLC
Burr Ridge Wind, LLC
Cage Ranch Solar II, LLC
Cage Ranch Solar III, LLC
Cage Ranch Solar, LLC
Caldwell Solar II, LLC
Caldwell Solar, LLC
Canby Solar, LLC
Cass Wind Farm, LLC
Cattle Ridge Wind Farm 2, LLC
Cedar Grove Solar, LLC
Centennial Solar, LLC
Clay Boswell Solar, LLC
Clear Creek Solar, LLC
Clermont Solar, LLC
Clinton County Solar, LLC
Coles Solar, LLC
Compass Prairie Wind, LLC
Coneflower Solar, LLC[5]
Conestoga Wind, LLC
Copperhead Solar, LLC
Creekview Solar, LLC
Crocker Wind Farm 2, LLC
Dahlia Solar, LLC[5]
Dakota Hills Wind Farm, LLC
Day Lily Solar, LLC[5]
Deatsville Solar, LLC
Deer Trail Solar, LLC
Dodson Creek Solar, LLC[6]
Donnellson Solar, LLC
Elburn Solar, LLC
Eldena Solar, LLC
Elk Creek Solar 2, LLC
Elk Creek Solar, LLC
EUA Energy Investment Corporation[2]
Exie Solar, LLC
Falls City Solar, LLC
Fayette Solar, LLC[7]
Fillmore County Solar Project, LLC
Firstview Wind Farm, LLC
Fort Solar, LLC
Front Range Wind Farm, LLC
Gardenia Solar, LLC[5]
Golden Solar, LLC
Goldendale Solar, LLC
Goldenrod Wind Farm, LLC
Goldfinch Solar, LLC
Grand Junction Solar, LLC
Granite State Power Link LLC[3]
Grant Solar 2, LLC
Grant Solar, LLC
Grayson Solar, LLC
Greenbrier Creek Solar, LLC
Greensky Solar, LLC
Greenwood Solar, LLC
Grid NY LLC[8]
Grindstone Wind Farm, LLC[9]
Hale County Solar, LLC
Hansford Energy Storage, LLC
Harmony Solar ND 2, LLC
Harmony Solar ND, LLC
Harrington Solar, LLC
Hartley Solar, LLC
Hearth Solar, LLC
Hill River Solar, LLC
Honeybee Solar, LLC
Hoosier Solar, LLC
Hoskins Solar, LLC
Illumination Solar, LLC
Innovation Solar, LLC
Itasca Energy Development, LLC[5]
Itasca Energy Services, LLC
Jack Rabbit Wind, LLC
Jackson County Solar, LLC
Junction Solar, LLC
KeySpan CI Midstream Limited[3]
KeySpan Energy Corporation[8]
KeySpan Energy Services Inc.[3]
KeySpan Gas East Corporation[8]
KeySpan International Corporation[3]
KeySpan MHK, Inc.[3]
KeySpan Midstream Inc.[3]
KeySpan Plumbing Solutions, Inc.[8]
Knox Solar, LLC
KSI Contracting, LLC[3]
KSI Electrical, LLC[3]
KSI Mechanical, LLC[3]
Lake Charlotte Solar, LLC
Lake Iris Solar, LLC
Lakeside Solar, LLC
Land Management & Development, Inc.[8]
Landwest, Inc.[8]
Lansing Solar, LLC
Leola Wind Farm, LLC
Liberty Solar, LLC
Lilac Solar, LLC[5]
Livingston County Solar, LLC
Long Mount Solar, LLC
Lordsburg Solar, LLC
Louisa Solar, LLC
Lowlands Solar, LLC
Lydia Solar, LLC
Marion County Solar, LLC
Massachusetts Electric Company[2]
Maverick Wind Farm, LLC
Meadowlands Solar, LLC
Metrowest Realty LLC[3]
Miller Creek Solar, LLC
Millers Ferry Solar, LLC
Morgan County Solar, LLC
Morning Glory Solar, LLC[5]
Muddy Creek Solar, LLC
Mustang Ridge Wind Farm, LLC
Mystic Steamship Corporation[6]
Nantucket Electric Company[2]
National Grid Development Holdings Corp.[3]
National Grid Electric Services LLC[8]
National Grid Energy Management LLC[3]
National Grid Energy Services LLC[3]
National Grid Energy Trading Services LLC[8]
National Grid Engineering & Survey Inc.[8]
National Grid Generation LLC[8]
National Grid Generation Ventures LLC[8]
National Grid Glenwood Energy Center, LLC[3]
National Grid IGTS Corp.[8]
National Grid Insurance USA Ltd[10]
National Grid Islander East Pipeline LLC[3]
National Grid LNG GP LLC[3]
National Grid LNG LLC[3]
National Grid LNG LP LLC[3]
National Grid Millennium LLC[3]
National Grid NE Holdings 2 LLC[2]
National Grid North America Inc.[3]

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

National Grid Partners Inc.[8]
National Grid Partners LLC[3]
National Grid Port Jefferson Energy Center LLC[3]
National Grid Renewables Development, LLC
National Grid Renewables E Wind, LLC[5]
National Grid Renewables Operations, LLC[3]
National Grid Renewables Projects, LLC[5]
National Grid Renewables Stutsman, LLC
National Grid Renewables, LLC[3]
National Grid Services Inc.[3]
National Grid US 6 LLC[3,†]
National Grid US LLC[3]
National Grid USA Service Company, Inc.[2]
National Grid USA[3]
NEES Energy, Inc.[2]
New England Electric Transmission Corporation[4]
New England Energy Incorporated[2]
New England Hydro Finance Company, Inc. (53.704%)[2]
New England Hydro-Transmission Corporation (53.704%)[4]
New England Hydro-Transmission Electric Company, Inc. (53.704%)[2]
New England Power Company[2]
Newport America Corporation[11]
Newton Solar, LLC
NG Renewables Energy Marketing, LLC[3]
NG Renewables Energy Services, LLC
NGNE LLC[3]
NGV Emerald Energy Venture Holdings, LLC[3]
NGV OSW Holdings, LLC[3]
NGV US Distributed Energy Inc.[3]
NGV US Transmission Inc.[3]
NGV US, LLC[3]
Niagara Mohawk Energy, Inc.[3]
Niagara Mohawk Holdings, Inc.[8]
Niagara Mohawk Power Corporation[8]
Niobrara Wind, LLC
NM Properties, Inc.[8]
Noble Solar, LLC[12]
Nordic VOS, LLC
North East Transmission Co., Inc.[3]
North Fork Wind, LLC
Northeast Renewable Link LLC[3]
Opinac North America, Inc.[3]
Parklawn Solar, LLC
Pennington Solar, LLC
Peony Solar, LLC
Philadelphia Coke Co., Inc.[3]
Pierce County Solar, LLC
Pike County Solar, LLC
Pipestone Solar, LLC
Plum Creek Wind Farm 2, LLC
Plum Creek Wind Farm, LLC
Port of the Islands North, LLC[8]
Portage Solar, LLC
Prairie Oasis Solar, LLC
Prairie Rose Wind 2, LLC[5]
Prosperity Wind Farm 2, LLC
Prosperity Wind Farm, LLC
Red Rock Solar SD, LLC
Red Wolf Solar, LLC
Regal Solar 2, LLC
Regal Solar, LLC
River North Solar, LLC
Robertson Solar, LLC
Rock Ridge Wind Farm, LLC
Rolling Hills Solar, LLC
Ross County Solar, LLC[6]
Royal Solar 2, LLC
Royal Solar, LLC
Royerton Solar, LLC
Saginaw Bay Solar, LLC
Sandstone Creek Solar 2, LLC
Sandstone Creek Solar, LLC
Sapphire Sky Wind Farm, LLC
Sherco Solar 2, LLC[5]
Sherco Solar, LLC[5]
Silver City Solar, LLC
Simpson Solar, LLC
Spotlight Solar, LLC
Spring Brook Solar, LLC
Spring River Solar, LLC
Springfield Solar Farm, LLC
Stony Brook Wind, LLC
Stony Point Solar, LLC
Stove Creek Solar, LLC
Sturgis Solar, LLC
Summit Lake Solar, LLC
Sunbeam Solar, LLC
Sunrise Solar, LLC
Sycamore Creek Solar, LLC
Thacker Solar, LLC
The Brooklyn Union Gas Company[8]
The Narragansett Electric Company[11]
Torchlight Solar, LLC[5]
Transgas Inc.[2]
Tri-City Solar, LLC
Uintah Solar, LLC
Unbridled Solar, LLC
Upper Hudson Development Inc.[8]
Valley Solar, LLC
Vermont Green Line Devco, LLC (90%)[3]
Vibrant Solar, LLC
Virgo Community Solar Gardens, LLC[5]
Virtue Solar, LLC
Vivid Solar, LLC
Wallowa Solar, LLC
Wayfinder Group, Inc.[2]
Wheatfield Solar, LLC
White Elm Wind Farm, LLC
Wild Springs Solar, LLC[5]
Wildcat Ridge Wind Farm, LLC
Wildhorse Creek Solar, LLC
Willard Solar, LLC
Williams County Solar, LLC
Wiregrass Solar, LLC
Woodlands Solar, LLC
Worthington Solar, LLC
Yellowhammer Solar, LLC
Young County Solar, LLC

Notes to the consolidated financial statements continued

34. Subsidiary undertakings, joint ventures and associates continued

Subsidiary undertakings continued

Incorporated in Australia

Registered office: Level 7, 330 Collins Street, Melbourne, VIC 3000, Australia

National Grid Australia Pty Limited

Incorporated in Canada

Registered office: Stewart McKelvey LLP, c/o Charles Reagh, Queen's Marque, 600-1741 Lower Water Street, Halifax, Nova Scotia, B3J 0J2, Canada

KeySpan Energy Development Co.

Incorporated in Guernsey

Registered office: 1st & 2nd Floors Elizabeth House, Les Ruettes Brayes, St Peter Port, GY1 1EW, Guernsey, Channel Islands

WPD Limited (Guernsey)†

Registered office: PO Box 155, Mill Court, La Charroterie, St. Peter Port, Guernsey, GY1 4ET, Guernsey, Channel Islands

Aztec Insurance Limited

Incorporated in Hong Kong

Registered office: Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong

National Grid Hong Kong Limited†

Incorporated in the Isle of Man

Registered office: Third Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE, Isle of Man, UK

National Grid Insurance Company (Isle of Man) Limited
NGT Holding Company (Isle of Man) Limited*†

Incorporated in Luxembourg

Registered office: 412F, Route d'Esch, L-2086, Luxembourg, Grand Duchy of Luxembourg

National Grid Luxembourg SARL

Incorporated in the Netherlands

Registered office: Westblaak 89, 3012 KG Rotterdam, PO Box 21153, 3001 AD, Rotterdam, Netherlands

British Transco International Finance B.V.

Incorporated in the Republic of Ireland

Registered office: c/o Moore Stephens Nathans, Third Floor, Ulysses House, 23/24 Foley Street, Dublin, D01 W2T2, Ireland

National Grid Company (Ireland) Designated Activity Company*

1. Registered office: National Registered Agents, Inc., 160 Greentree Drive, Suite 101, Dover DE 19904, USA.
2. Registered office: Corporation Service Company, 84 State Street, Boston MA 02109, USA.
3. Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, USA.
4. Registered office: Corporation Service Company, 10 Ferry Street, Suite 313, Concord NH 03301, USA.
5. Registered office: National Grid Renewables Development, LLC, 8400 Normandale Lake Blvd. Suite 1200, Bloomington, MN 55437, USA.
6. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801, USA.
7. Registered office: 60 Mine Lake Court, Suite 200, Raleigh, Wake County, NC 27615, USA.
8. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
9. Registered office: National Registered Agents, Inc., 30600 Telegraph Road, Suite 2345, Bingham Farms, MI 48025-5720, USA.
10. Registered office: One MetroTech Center, Brooklyn NY 11201, USA.
11. Registered office: Corporation Service Company, 222 Jefferson Boulevard, Suite 200, Warwick RI 02888, USA.
12. Registered office: National Registered Agents, Inc., 1999 Bryan Street, Dallas, Dallas County TX 75201, USA.

* In liquidation.
† Entity is tax resident in the United Kingdom.

34. Subsidiary undertakings, joint ventures and associates continued

Joint ventures

A list of the Group's joint ventures as at 31 March 2022 is given below. All joint ventures are included in the Group's financial statements using the equity method of accounting. Principal joint ventures are identified in **bold**.

Incorporated in England and Wales

Registered office: 1–3 Strand, London WC2N 5EH, UK (unless stated otherwise in footnotes).

BritNed Development Limited (50%)*
Joint Radio Company Limited (50%)[1]**
National Places LLP (50%)[2]
Nemo Link Limited (50%)
NGET/SPT Upgrades Limited (50%)†

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Bight Wind Holdings, LLC (27.27%)[3]
Clean Energy Storage Systems LLC (previously Clean Energy Generation, LLC) (50%)
Emerald Energy Venture LLC (51%)
Island Park Energy Center, LLC (50%)
Islander East Pipeline Company, LLC (50%)[3]
LI Energy Storage System, LLC (50%)
LI Solar Generation, LLC (50%)

Incorporated in France

Registered office: 1 Terrasse Bellini, Tour Initiale, TSA 41000 – 9291, Paris La Defense, CEDEX, France

IFA2 (50%)

Associates

A list of the Group's associates as at 31 March 2022 is given below. Unless otherwise stated, all associates are included in the Group's financial statements using the equity method of accounting. Principal associates are identified in **bold**.

Incorporated in the US

Registered office: Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808, USA (unless stated otherwise in footnotes).

Clean Line Energy Partners LLC (32%)[3]
Connecticut Yankee Atomic Power Company (19.5%)[4]
Direct Global Power, Inc. (26%)[3]
Energy Impact Fund LP (9.41%)[5]
KHB Venture LLC (33.33%)[6]
Maine Yankee Atomic Power Company (24%)[7]
Millennium Pipeline Company, LLC (26.25%)[3]
New York Transco LLC (28.3%)[8]
NYSEARCH RMLD, LLC (22.63%)
The Hive IV, LLC (28.2%)[3]
Yankee Atomic Electric Company (34.5%)[9]

Incorporated in Belgium

Registered office: Avenue de Cortenbergh 71, 1000 Brussels, Belgium

Coreso SA (15.84%)

Other investments

A list of the Group's other investments as at 31 March 2022 is given below.

Incorporated in England and Wales

Registered office: 1 More London Place, London SE1 2AF, UK

Energis plc (33.06%)‡

Registered office: Third Floor, Northumberland House, 303–306 High Holborn, London, WC1V 7JZ

Electralink Limited (27.04%)

1. Registered office: Friars House, Manor House Drive, Coventry, CV1 2TE, UK.
2. Registered office: 80 Cheapside, London, EC2V 6EE, UK.
3. Registered office: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington DE 19801, USA.
4. Registered office: Carla Pizzella, 362 Injun Hollow Road, East Hampton CT 06424-3099, USA.
5. Registered office: Harvard Business Services, Inc., 16192 Coastal Highway, Lewes DE 19958, USA.
6. Registered office: De Maximus Inc., 135 Beaver Street, 4th Floor, Waltham MA 02452, USA.
7. Registered office: Joseph D Fay, 321 Old Ferry Road, Wiscasset ME 04578, USA.
8. Registered office: Corporation Service Company, 80 State Street, Albany NY 12207, USA.
9. Registered office: Karen Sucharzewski, 49 Yankee Road, Rowe MA 01367, USA.

* National Grid Interconnector Holdings Limited owns 284,500,000 €0.20 C Ordinary shares and one £1.00 Ordinary A share.
** National Grid Gas plc owns all £1.00 A Ordinary shares.
† National Grid Electricity Transmission plc owns 50 £1.00 A Ordinary shares.
‡ In administration.

Our interests and activities are held or operated through the subsidiaries, joint arrangements or associates as disclosed above. These interests and activities (and their branches) are established in – and subject to the laws and regulations of – these jurisdictions.

The following UK subsidiaries will take advantage of the audit exemption set out within section 479A of the Companies Act 2006 supported by guarantees issued by National Grid plc over their liabilities for the year ended 31 March 2022:

Company name	Company number
NatGrid One Limited	5521240
Natgrid TW1 Limited	7579324
National Grid Holdings Limited	3096772
National Grid International Limited	2537092
National Grid Twelve Limited	4355616
National Grid Twenty Three Limited	6999009
National Grid (US) Holdings Limited	2630496
National Grid (US) Investments 2 Limited	3784528
National Grid (US) Investments 4 Limited	3867128
National Grid (US) Partner 1 Limited	4314432

35. Sensitivities

In order to give a clearer picture of the impact on our results or financial position of potential changes in significant estimates and assumptions, the following sensitivities are presented. These sensitivities are based on assumptions and conditions prevailing at the year end and should be used with caution. The effects provided are not necessarily indicative of the actual effects that would be experienced because our actual exposures are constantly changing.

The sensitivities in the tables below show the potential impact in the income statement (and consequential impact on net assets) for a reasonably possible range of different variables each of which have been considered in isolation (i.e. with all other variables remaining constant). There are a number of these sensitivities which are mutually exclusive, and therefore if one were to happen, another would not, meaning a total showing how sensitive our results are to these external factors is not meaningful.

The sensitivities included in the tables below broadly have an equal and opposite effect if the sensitivity increases or decreases by the same amount unless otherwise stated.

(a) Sensitivities on areas of estimation uncertainty

The table below sets out the sensitivity analysis for certain areas of estimation uncertainty set out in note 1F. These estimates are those that have a significant risk of resulting in a material adjustment to the carrying values of assets and liabilities in the next year. Note that the sensitivity analysis for the useful economic lives of our gas network assets is included in note 13.

	2022		2021	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Pensions and other post-retirement benefit liabilities (pre-tax)[1]:				
UK discount rate change of 0.5%[2]	**12**	**1,002**	4	952
US discount rate change of 0.5%[2]	**16**	**650**	17	730
UK RPI rate change of 0.5%[3]	**11**	**733**	3	723
UK long-term rate of increase in salaries change of 0.5%	**4**	**88**	1	42
US long-term rate of increase in salaries change of 0.5%	**3**	**41**	3	42
UK change of one year to life expectancy at age 65[4]	**4**	**635**	1	612
US change of one year to life expectancy at age 65	**3**	**444**	4	429
Assumed US healthcare cost trend rates change of 1%	**24**	**414**	26	437
Environmental provision:				
10% change in estimated future cash flows	**188**	**188**	170	170

1. The changes shown are a change in the annual pension and other post-retirement benefit service charge and change in the defined benefit obligations.
2. A change in the discount rate is likely to occur as a result of changes in bond yields and as such would be expected to be offset to a significant degree by a change in the value of the bond assets held by the plans. In the UK, there would also be a £164 million (2021: £257 million) net assets offset from the buy-in policies, where the accounting value of the buy-in asset is set equal to the associated liabilities.
3. The projected impact resulting from a change in RPI reflects the underlying effect on pensions in payment, pensions in deferment and resultant increases in salary assumptions. The buy-in policies would have a £119 million (2021: £190 million) net assets offset to the above.
4. In the UK, the buy-in policies and the longevity swap entered into would have a £111 million (2021: £183 million) net assets offset to the above.

Pensions and other post-retirement benefits assumptions

Sensitivities have been prepared to show how the defined benefit obligations and annual service costs could potentially be impacted by changes in the relevant actuarial assumption that were reasonably possible as at 31 March 2022. In preparing sensitivities, the potential impact has been calculated by applying the change to each assumption in isolation and assuming all other assumptions remain unchanged. This is with the exception of RPI in the UK where the corresponding change to increases to pensions in payment, increases to pensions in deferment and increases in salary are recognised.

WPD goodwill impairment assessment

Sensitivities have been performed to show the impact of reasonable changes to key assumptions in the WPD goodwill impairment test. Considering an increase in the pre-tax discount rate of 0.5% (to 5.7%) indicates the estimated value-in-use would be £1,033 million lower than WPD's carrying amount at 31 March 2022, whilst reducing the terminal growth rate to 2% results in the estimated value-in-use equalling WPD's carrying amount at 31 March 2022.

35. Sensitivities continued

(b) Sensitivities on financial instruments

We are further required to show additional sensitivity analysis under IFRS 7 and these are shown separately in the subsequent table due to the additional assumptions that are made in order to produce meaningful sensitivity disclosures.

Our net debt as presented in note 29 is sensitive to changes in market variables, primarily being UK and US interest rates, the UK RPI and the dollar to sterling exchange rate. These impact the valuation of our borrowings, deposits and derivative financial instruments. The analysis illustrates the sensitivity of our financial instruments to reasonably possible changes in these market variables.

The following main assumptions were made in calculating the sensitivity analysis for continuing operations:

- the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives portfolio, and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations in place at 31 March 2022 and 2021 respectively;
- the statement of financial position sensitivity to interest rates relates to items presented at their fair values: derivative financial instruments; our investments measured at FVTPL and FVOCI; and our liability measured at FVTPL. Further debt and other deposits are carried at amortised cost and so their carrying value does not change as interest rates move;
- the sensitivity of interest to movements in interest rates is calculated on net floating rate exposures on debt, deposits and derivative instruments;
- changes in the carrying value of derivatives from movements in interest rates of designated cash flow hedges are assumed to be recorded fully within equity; and
- changes in the carrying value of derivative financial instruments designated as net investment hedges from movements in interest rates are presented in equity as costs of hedging, with a one-year release to the income statement. The impact of movements in the dollar to sterling exchange rate are recorded directly in equity.

	2022		2021	
	Income statement £m	**Other equity reserves £m**	Income statement £m	Other equity reserves £m
Financial risk (post-tax):				
UK RPI change of 0.5%[1]	**18**	**–**	25	–
UK interest rates change of 0.5%	**41**	**134**	12	98
US interest rates change of 0.5%	**4**	**8**	6	22
US dollar exchange rate change of 10%[2]	**43**	**397**	44	285

1. Excludes sensitivities to LPI curve. Further details on sensitivities are provided in note 32(g).
2. The other equity reserves impact does not reflect the exchange translation in our US subsidiaries' net assets. It is estimated this would change by £1,670 million (2021: £1,425 million) in the opposite direction if the dollar exchange rate changed by 10%.

Our commodity contract derivatives are sensitive to price risk. Additional sensitivities in respect to commodity price risk and to our derivative fair values are as follows:

	2022		2021	
	Income statement £m	**Net assets £m**	Income statement £m	Net assets £m
Commodity price risk (post-tax):				
10% increase in commodity prices	**53**	**53**	20	20
10% decrease in commodity prices	**(54)**	**(54)**	(21)	(21)
Assets and liabilities carried at fair value (post-tax):				
10% fair value change in derivative financial instruments[1]	**(55)**	**(55)**	14	14
10% fair value change in commodity contract derivative liabilities	**20**	**20**	6	6

1. The effect of a 10% change in fair value assumes no hedge accounting.

Notes to the consolidated financial statements continued

36. Additional disclosures in respect of guaranteed securities

Niagara Mohawk Power Corporation, a wholly owned subsidiary of the Group, has issued preferred shares that are listed on a US national securities exchange and are guaranteed by National Grid plc. This guarantor commits to honour any liabilities should the company issuing the debt have any financial difficulties. In order to provide debt holders with information on the financial stability of the company providing the guarantee, we are required to disclose individual financial information for this company. We have chosen to include this information in the Group financial statements rather than submitting separate stand-alone financial statements.

The following summarised financial information is given in respect of Niagara Mohawk Power Corporation as a result of National Grid plc's guarantee, dated 29 October 2007, of Niagara Mohawk Power Corporation's 3.6% and 3.9% issued preferred shares, which amount to £29 million. National Grid plc's guarantee of Niagara Mohawk Power Corporation's preferred shares is full and unconditional. There are no restrictions on the payment of dividends by Niagara Mohawk Power Corporation or limitations on National Grid plc's guarantee of the preferred shares, and there are no factors that may affect payments to holders of the guaranteed securities.

The following summarised financial information for National Grid plc and Niagara Mohawk Power Corporation is presented on a combined basis and is intended to provide investors with meaningful and comparable financial information, and is provided pursuant to the early adoption of Rule 13-01 of Regulation S-X in lieu of the separate financial statements of Niagara Mohawk Power Corporation.

Summarised financial information is presented, on a combined basis, as at 31 March 2022. The combined amounts are presented under IFRS measurement principles. Intercompany transactions have been eliminated. Investments in other non-issuer and non-guarantor subsidiaries are included at cost, subject to impairment.

Summarised financial information for the year ended 31 March 2022 – IFRS

	National Grid plc and Niagara Mohawk Power Corporation combined £m
Combined statement of financial position	
Non-current loans to other subsidiaries	–
Non-current assets	10,068
Current loans to other subsidiaries	28,525
Current assets	2,431
Current loans from other subsidiaries	(14,512)
Current liabilities	(10,276)
Non-current loans from other subsidiaries	(2,050)
Non-current liabilities	(8,294)
Net assets[1]	5,892
Equity	5,892
Combined income statement – continuing operations	
Revenue	2,987
Operating costs	(2,358)
Operating profit	629
Other income from other subsidiaries	2,500
Other income and costs, including taxation	(360)
Profit after tax	2,769

1. Excluded from net assets above are investments in other consolidated subsidiaries with a carrying value of £14,440 million.

37. Acquisitions

Business combinations are accounted for using the acquisition method. The identifiable assets acquired and liabilities assumed are recognised at their fair values at the acquisition date.

Goodwill is initially measured as the excess of the aggregate of the consideration transferred, the amount recognised for any non-controlling interest and the acquisition-date fair values of any previously held interest in the acquiree over the fair value of the identifiable assets acquired and liabilities assumed at the acquisition date.

Acquisition-related costs are expensed as incurred and included within Other operating income and costs.

Acquisition of WPD

On 14 June 2021, National Grid plc acquired 100% of the share capital of PPL WPD Investments Limited (WPD), the holding company of Western Power Distribution plc, which is the UK's largest electricity distribution network operator. The acquisition, along with the two planned disposals disclosed in note 10, strategically pivots National Grid's UK portfolio towards electricity, in order to significantly enhance National Grid's role in the delivery of the UK's net zero targets, given that electricity distribution is expected to see a high level of asset growth as a result of the ongoing energy transition.

The total cash consideration for the transaction was £7.9 billion, all of which was paid upfront, with no further contingent or deferred consideration payable. As a result of the acquisition, one of WPD's existing borrowing facilities became repayable immediately due to a change in control clause within the original borrowing agreement. The borrowing facility was immediately replaced with an intercompany loan of £350 million from National Grid plc. National Grid funded the transaction price and the new intercompany loan by taking out a bridge financing facility (see note 33), that it will commence repaying with the proceeds of the planned disposals.

The fair values of the assets and liabilities following the finalisation of the purchase price allocation are set out below:

	IFRS book value at acquisition £m	Fair value adjustments £m	Fair value £m
Non-current assets			
Property, plant and equipment	14,077	(4,026)	10,051
Other intangible assets	49	1,714	1,763
Pension assets	402	164	566
Other non-current assets	27	—	27
Total non-current assets	14,555	(2,148)	12,407
Current assets			
Trade and other receivables	268	—	268
Financial and other investments	69	—	69
Cash	44	—	44
Other current assets	42	—	42
Total current assets	423	—	423
Total assets	14,978	(2,148)	12,830
Current liabilities			
Borrowings	(730)	—	(730)
Trade and other payables	(531)	48	(483)
Other current liabilities	(35)	—	(35)
Total current liabilities	(1,296)	48	(1,248)
Non-current liabilities			
Borrowings	(5,967)	(1,589)	(7,556)
Deferred tax	(1,013)	224	(789)
Contract liabilities	(2,706)	2,706	—
Other non-current liabilities	(56)	(21)	(77)
Total non-current liabilities	(9,742)	1,320	(8,422)
Total liabilities	(11,038)	1,368	(9,670)
Total identifiable net assets	3,940	(780)	3,160
Goodwill	1,254	3,467	4,721
Total consideration transferred	5,194	2,687	7,881
Satisfied by:			
Cash consideration			7,881
Total consideration transferred			7,881

Financial Statements

37. Acquisitions continued

The goodwill arising from the acquisition represents the future expected growth in the WPD business, the benefits that are expected to be achieved as a result of the combination of the two businesses and the expertise of the management team acquired. No component of goodwill qualifies for recognition as a separate tangible or intangible asset. The goodwill is not deductible for tax purposes and at the acquisition date, there were no material contingent liabilities.

The fair value of trade and other receivables of £270 million includes trade receivables with a fair value of £86 million. The gross contractual amount for trade receivables due is £103 million, of which £17 million was expected to be uncollectible.

Total acquisition-related costs of £110 million were recognised within Other operating income and costs, within exceptional items and remeasurements in the consolidated income statement, of which £15 million was recognised in the year ended 31 March 2021 and £95 million in the year ended 31 March 2022.

WPD generated revenues of £1,468 million and profit before tax of £781 million for the period from 14 June 2021 to 31 March 2022. If the acquisition had occurred on 1 April 2021, the Group's consolidated revenue and consolidated profit before tax from continuing operations for the 12 months ended 31 March 2022 would have been £18,806 million and £3,600 million respectively.

38. Post balance sheet events

On 6 April 2022, the UK government announced that the entirety of ESO will become part of an independent system operator public body, following the Future System Operator (FSO) consultation. The FSO, which is subject to legislative approval, will take on a number of key roles in electricity and gas in Great Britain. The Group is working closely with BEIS and Ofgem to plan and prepare for the implementation of the changes required to create the FSO.

On 11 May 2022, Ofgem approved the Group's request to return £200 million of interconnector revenue subject to the cap and floor regime to consumers ahead of schedule (see note 26). This return will take place over the next two years. The Group is now working through the formal steps outlined under the regulatory framework which will result in the finalisation of the mechanism by which the revenues will be returned.

Company accounting policies

We are required to include the stand-alone balance sheet of our ultimate Parent Company, National Grid plc, under the Companies Act 2006. This is because the publicly traded shares are actually those of National Grid plc (the 'Company') and the following disclosures provide additional information to shareholders.

A. Basis of preparation

National Grid plc is the Parent Company of the National Grid Group, which is engaged in the transmission and distribution of electricity and gas in Great Britain and northeastern US. The Company is a public limited company, limited by shares. The Company is incorporated and domiciled in England, with its registered office at 1–3 Strand, London, WC2N 5EH.

The financial statements of National Grid plc for the year ended 31 March 2022 were approved by the Board of Directors on 18 May 2022. The Company meets the definition of a qualifying entity under Financial Reporting Standard 100 (FRS 100) issued by the Financial Reporting Council. Accordingly, these individual financial statements of the Company have been prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101). In preparing these financial statements the Company applies the recognition and measurement requirements of International Financial Reporting Standards (IFRS) as adopted by the UK, but makes amendments where necessary in order to comply with the provisions of the Companies Act 2006 and sets out below where advantage of the FRS 101 disclosure exemptions has been taken.

These individual financial statements have been prepared on a historical cost basis, except for the revaluation of financial instruments, and are presented in pounds sterling, which is the currency of the primary economic environment in which the Company operates. The comparative financial information has also been prepared on this basis.

These individual financial statements have been prepared on a going concern basis, which presumes that the Company has adequate resources to remain in operation, and that the Directors intend it to do so, for at least one year from the date the financial statements are signed. As the Company is part of a larger group it participates in the Group's centralised treasury arrangements and so shares banking arrangements with its subsidiaries. The Company is expected to generate positive cash flows or be in a position to obtain finance via intercompany loans to continue to operate for the foreseeable future.

In accordance with the exemption permitted by section 408 of the Companies Act 2006, the Company has not presented its own profit and loss account or statement of comprehensive income.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements of the Company in accordance with FRS 101:

- a cash flow statement and related notes;
- disclosures in respect of transactions with wholly owned subsidiaries;
- disclosures in respect of capital management; and
- the effects of new but not yet effective IFRS standards.

The exemption from disclosing key management personnel compensation has not been taken as there are no costs borne by the Company in respect of employees, and no related costs are recharged to the Company.

As the consolidated financial statements of National Grid plc, which are available from the registered office, include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 in respect of certain disclosures required by IFRS 13 'Fair Value Measurement' and the disclosures required by IFRS 7 'Financial Instruments: Disclosures'.

There are no areas of judgement or key sources of estimation uncertainty that are considered to have a significant effect on the amounts recognised in the financial statements.

The balance sheet has been prepared in accordance with the Company's accounting policies approved by the Board and described below.

B. Fixed asset investments

Investments held as fixed assets are stated at cost less any provisions for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairments are calculated such that the carrying value of the fixed asset investment is the lower of its cost or recoverable amount. Recoverable amount is the higher of its fair value less costs of disposal and its value-in-use. The Company accounts for common control transactions at cost.

C. Tax

Current tax for the current and prior periods is provided at the amount expected to be paid or recovered using the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full on temporary differences which result in an obligation at the balance sheet date to pay more tax, or the right to pay less tax, at a future date, at tax rates expected to apply when the temporary differences reverse based on tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is provided for using the balance sheet liability method and is recognised on temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax assets are recognised to the extent that it is regarded as more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

D. Foreign currencies

Transactions in currencies other than the functional currency of the Company are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at closing exchange rates. Gains and losses arising on retranslation of monetary assets and liabilities are included in the profit and loss account.

E. Financial instruments

The Company's accounting policies are the same as the Group's accounting policies under IFRS, namely IAS 32 'Financial Instruments: Presentation', IFRS 9 'Financial Instruments' and IFRS 7 'Financial Instruments: Disclosures'. The Company applies these policies only in respect of the financial instruments that it has, namely investments, derivative financial instruments, debtors, cash at bank and in hand, borrowings and creditors.

The policies are set out in notes 15, 17, 19, 20, 21 and 22 to the consolidated financial statements. The Company is taking the exemption for financial instruments disclosures, because IFRS 7 disclosures are given in notes 32 and 35 to the consolidated financial statements.

F. Hedge accounting

The Company applies the same accounting policy as the Group in respect of fair value hedges and cash flow hedges. This policy is set out in note 32 to the consolidated financial statements.

G. Parent Company guarantees

The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. Such guarantees are accounted for by the Company as insurance contracts. In the event of default or non-performance by the subsidiary, a liability is recorded in accordance with IAS 37.

Company accounting policies continued

H. Share awards to employees of subsidiary undertakings
The issuance by the Company to employees of its subsidiaries of a grant over the Company's options represents additional capital contributions by the Company to its subsidiaries. An additional investment in subsidiaries results in a corresponding increase in shareholders' equity. The additional capital contribution is based on the fair value of the option at the date of grant, allocated over the underlying grant's vesting period. Where payments are subsequently received from subsidiaries, these are accounted for as a return of a capital contribution and credited against the Company's investments in subsidiaries. The Company has no employees except for the Group's Non-executive Directors (refer to the Directors' Remuneration Report on page 121).

I. Dividends
Interim dividends are recognised when they are paid to the Company's shareholders. Final dividends are recognised when they are approved by shareholders.

J. Directors' remuneration
Full details of Directors' remuneration are disclosed on pages 108 – 131.

Company balance sheet
as at 31 March

	Notes	2022 £m	2021 £m
Fixed assets			
Investments	1	**14,432**	14,389
Current assets			
Debtors (amounts falling due within one year)	2	**28,375**	20,699
Debtors (amounts falling due after more than one year)	2	**87**	143
Investments	5	**1,368**	784
Cash at bank and in hand		**45**	40
Total current assets		**29,875**	21,666
Creditors (amounts falling due within one year)	3	**(23,721)**	(18,312)
Net current assets		**6,154**	3,354
Total assets less current liabilities		**20,586**	17,743
Creditors (amounts falling due after more than one year)	3	**(4,407)**	(3,085)
Net assets		**16,179**	14,658
Equity			
Share capital	7	**485**	474
Share premium account		**1,300**	1,296
Cash flow hedge reserve		**(15)**	(3)
Cost of hedging reserve		**(3)**	(15)
Other equity reserves		**469**	426
Profit and loss account	8	**13,943**	12,480
Total shareholders' equity		**16,179**	14,658

The Company's profit after tax for the year was £2,371 million (2021: £5,107 million profit). Profits available for distribution by the Company to shareholders were £12.2 billion at 31 March 2022. The financial statements of the Company on pages 235 – 241 were approved by the Board of Directors on 18 May 2022 and were signed on its behalf by:

Paula Rosput Reynolds Chair
Andy Agg Chief Financial Officer

National Grid plc
Registered number: 4031152

Company statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Cash flow hedge reserve £m	Cost of hedging reserve £m	Other equity reserves £m	Profit and loss account £m	Total shareholders' equity £m
At 1 April 2020	470	1,301	(28)	(6)	399	6,349	8,485
Profit for the year[1]	—	—	—	—	—	5,107	5,107
Other comprehensive profit/(loss) for the year							
Transferred to/(from) equity (net of tax)	—	—	25	(9)	—	—	16
Dividends in specie (note 1)	—	—	—	—	—	2,422	2,422
Total comprehensive profit/(loss) for the year	—	—	25	(9)	—	7,529	7,545
Other equity movements							
Scrip dividend-related share issue[2]	4	(5)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Purchase of own shares	—	—	—	—	—	(2)	(2)
Share awards to employees of subsidiary undertakings	—	—	—	—	27	—	27
Equity dividends	—	—	—	—	—	(1,413)	(1,413)
At 31 March 2021	474	1,296	(3)	(15)	426	12,480	14,658
Profit for the year[1]	—	—	—	—	—	2,371	2,371
Other comprehensive profit/(loss) for the year							
Transferred (from)/to equity (net of tax)	—	—	(12)	12	—	—	—
Total comprehensive (loss)/profit for the year	—	—	(12)	12	—	2,371	2,371
Other equity movements							
Scrip dividend-related share issue[2]	11	(12)	—	—	—	—	(1)
Issue of treasury shares	—	—	—	—	—	17	17
Transactions in own shares	—	16	—	—	—	(3)	13
Share awards to employees of subsidiary undertakings	—	—	—	—	43	—	43
Equity dividends	—	—	—	—	—	(922)	(922)
At 31 March 2022	**485**	**1,300**	**(15)**	**(3)**	**469**	**13,943**	**16,179**

1. Included within profit for the year is dividend income from subsidiaries of £2,500 million (2021: £7,556 million).
2. Included within the share premium account are costs associated with scrip dividends.

Notes to the Company financial statements

1. Fixed asset investments

	Shares in subsidiary undertakings £m
Cost at 1 April 2020	14,362
Additions	2,447
Cost at 31 March 2021	16,809
Additions	43
Cost at 31 March 2022	16,852
Provision at 1 April 2020	—
Charge for the year	(2,420)
Provision at 1 April 2021	(2,420)
Charge for the year	—
Provision at 31 March 2022	(2,420)
Net book value at 31 March 2022	**14,432**
Net book value at 31 March 2021	14,389

During the year, there was a capital contribution of £43 million (2021: £27 million) which represents the fair value of equity instruments granted to subsidiaries' employees arising from equity-settled employee share schemes.

In the year ended 31 March 2021 the Company acquired 100% investments in National Grid (US) Investments 2 Limited and National Grid Hong Kong Limited from its subsidiary undertaking, National Grid Luxembourg SARL, for a total consideration of £2,420 million in the form of a dividend in specie. Then, as part of a wider Group restructuring project, National Grid (US) Investments 2 Limited was identified as a subsidiary no longer required and hence a number of accounting steps were implemented to reduce the net assets of that company to a nominal value. These steps included a capital reduction and the payment of dividends to the Company of £2,422 million. Following the receipt of these dividends, the carrying value of the investment was reviewed and an impairment charge was made to the profit and loss account of £2,420 million. It is anticipated that National Grid (US) Investments 2 Limited will be placed into voluntary liquidation in the next financial year.

The Company's direct subsidiary undertakings as at 31 March 2022 were as follows: National Grid (US) Holdings Limited, National Grid (US) Investments 2 Limited, National Grid Hong Kong Limited, National Grid Luxembourg SARL and NGG Finance plc. The names of indirect subsidiary undertakings, joint ventures and associates are included in note 34 to the consolidated financial statements.

The Directors believe that the carrying value of the investments is supported by the fair value of their underlying net assets.

2. Debtors

	2022 £m	2021 £m
Amounts falling due within one year		
Derivative financial instruments (note 4)	**65**	86
Amounts owed by subsidiary undertakings	**28,299**	20,613
Other debtors	**11**	—
	28,375	20,699
Amounts falling due after more than one year		
Derivative financial instruments (note 4)	**81**	139
Deferred tax	**6**	4
	87	143

The carrying values stated above are considered to represent the fair values of the assets. For the purposes of the impairment assessment, loans to subsidiary undertakings are considered low credit risk as the subsidiaries are solvent and are covered by the Group's liquidity arrangements.

A reconciliation of the movement in deferred tax in the year is shown below:

	Deferred tax £m
At 1 April 2020	8
Charged to equity	(4)
At 31 March 2021	4
Credited to equity	2
At 31 March 2022	**6**

Notes to the Company financial statements continued

3. Creditors

	2022 £m	2021 £m
Amounts falling due within one year		
Borrowings (note 6)	**9,029**	635
Derivative financial instruments (note 4)	**129**	34
Amounts owed to subsidiary undertakings	**14,512**	17,589
Other creditors	**51**	54
	23,721	18,312
Amounts falling due after more than one year		
Borrowings (note 6)	**2,091**	823
Derivative financial instruments (note 4)	**266**	203
Amounts owed to subsidiary undertakings	**2,050**	2,059
	4,407	3,085
Amounts owed to subsidiary undertakings falling due after more than one year are repayable as follows:		
In 1 to 2 years	**–**	–
In 2 to 3 years	**421**	–
In 3 to 4 years	**998**	425
In 4 to 5 years	**–**	997
More than 5 years	**631**	637
	2,050	2,059

The carrying values stated above are considered to represent the fair values of the liabilities.

4. Derivative financial instruments

The fair values of derivative financial instruments are:

	2022			2021		
	Assets £m	Liabilities £m	Total £m	Assets £m	Liabilities £m	Total £m
Amounts falling due within one year	**65**	**(129)**	**(64)**	86	(34)	52
Amounts falling due after more than one year	**81**	**(266)**	**(185)**	139	(203)	(64)
	146	**(395)**	**(249)**	225	(237)	(12)

For each class of derivative, the notional contract[1] amounts are as follows:

	2022 £m	2021 £m
Cross-currency interest rate swaps	**(5,034)**	(3,604)
Foreign exchange forward contracts	**(12,322)**	(9,517)
	(17,356)	(13,121)

1. The notional contract amounts of derivatives indicate the gross nominal value of transactions outstanding at the balance sheet date.

5. Investments

	2022 £m	2021 £m
Investments in short-term money funds	**1,164**	697
Restricted balances – collateral	**204**	87
	1,368	784

6. Borrowings

The following table analyses the Company's total borrowings:

	2022 £m	2021 £m
Amounts falling due within one year		
Bank loans	**8,206**	8
Bonds	**4**	362
Commercial paper	**819**	265
	9,029	635
Amounts falling due after more than one year		
Bonds	**2,091**	823
	11,120	1,458

The maturity of total borrowings is as follows:

	2022 £m	2021 £m
Total borrowings are repayable as follows:		
Less than 1 year	**9,029**	635
In 1 to 2 years	**–**	–
In 2 to 3 years	**–**	–
In 3 to 4 years	**–**	–
In 4 to 5 years	**–**	–
More than 5 years	**2,091**	823
	11,120	1,458

The notional amount of borrowings outstanding as at 31 March 2022 was £11,215 million (2021: £1,480 million).

7. Share capital

The called-up share capital amounting to £485 million (2021: £474 million) consists of 3,904,074,348 ordinary shares of $12\frac{204}{473}$ pence each (2021: 3,814,951,606 ordinary shares of $12\frac{204}{473}$ pence each). For further information on share capital, refer to note 27 of the consolidated financial statements.

8. Shareholders' equity and reserves

At 31 March 2022, the profit and loss account reserve stood at £13,943 million (2021: £12,480 million) of which profits available for distribution by the Company to shareholders were £12.2 billion (2021: £9.9 billion).

For further details of dividends paid and payable to shareholders, refer to note 9 of the consolidated financial statements.

9. Parent Company guarantees

The Company has guaranteed the repayment of the principal sum, any associated premium and interest on specific loans due by certain subsidiary undertakings primarily to third parties. At 31 March 2022, the sterling equivalent amounted to £2,084 million (2021: £2,108 million). The guarantees are for varying terms from less than one year to open-ended.

In addition, as part of the sectionalisation of the National Grid UK Pension Scheme on 1 January 2017, a guarantee of £1 billion has been provided to Section A. This payment is contingent on insolvency or on failure to pay pensions obligations to Section A and can be claimed against National Grid plc, National Grid Holdings One plc or Lattice Group Limited (up to £1 billion in total). Refer to note 25 of the consolidated financial statements.

10. Audit fees

The audit fee in respect of the Parent Company was £31,000 (2021: £28,000). Fees payable to Deloitte for non-audit services to the Company are not required to be disclosed as they are included within note 4 to the consolidated financial statements.