Registered No: 2366616

United Utilities PLC

Annual Report and Financial Statements

31 March 2022

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Terms used in this report:

United Utilities PLC's ultimate parent company is United Utilities Group PLC. 'UUG' means United Utilities Group PLC and 'United Utilities' or 'the UUG group' means United Utilities Group PLC and its subsidiary undertakings. 'UU' or 'the group' means United Utilities PLC and its subsidiary undertakings.

Cautionary statement:

This report contains certain forward-looking statements with respect to the operations, performance and financial condition of the group. By their nature, these statements involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements include without limitation any projections or guidance relating to the results of operations and financial conditions of the group as well as plans and objectives for future operations, expected future revenues, financing plans, expected expenditure and any strategic initiatives relating to the group, as well as discussions of our business plan and our assumptions, expectations, objectives and resilience with respect to climate scenarios. The forward-looking statements reflect knowledge and information available at the date of preparation of this annual report and the company undertakes no obligation to update these forward-looking statements. Nothing in this annual report should be construed as a profit forecast.

Our purpose

To provide great water and more for the North West.

As the water and wastewater service provider for the North West region of England, our purpose is why we exist and it drives us to focus on what matters to our stakeholders.

To provide great water... This means delivering our core water, wastewater and customer services, reliably and to the highest quality. It is what our customers expect and deserve.

and more... This means creating value for our stakeholders by understanding what matters to them through strong and constructive relationships. We do this by:

- supporting communities to be stronger;
- caring for customers through trusted relationships;
- creating a great place to work for all our employees;
- protecting and enhancing the environment;
- · delivering a sustainable return to investors; and
- innovating in partnership with suppliers.

for the North West. We are a part of the region we serve just as that region is a part of who we are as a business, and there are certain characteristics specific to the North West region that influence what we do.

Our vision

To be the best UK water and wastewater company.

This is what motivates us to improve our services and deliver more. To achieve this vision, our strategy has three themes – the best service to customers, at the lowest sustainable cost, in a responsible manner.

Our strategy

This is how we deliver our purpose and vision, and consists of three strategic themes.

The best service to customers

We put customers at the heart of everything we do. As well as delivering a reliable service of great tasting water and removing wastewater, we proactively keep customers informed about any work we are doing in their area and communicate with them in ways that meet their individual needs. For example, we now use 'push texts' to send updates and alerts to customers within a specified location.

The best service to customers means being available when they need to contact us, always interacting in a friendly and helpful manner, and offering tailored support and assistance for customers when they need it. As well as these day-to-day interactions, it means consulting on what matters to them. This shapes what we do; for example, we redesigned our bills based on customer research and feedback.

At the lowest sustainable cost

To run a resilient business, it is important to ensure cost reductions are sustainable so that we can keep them down without compromising on resilience or the quality of service we deliver.

When we develop our plans and assess different options, we look to minimise the whole-life cost. This fits with the total expenditure (totex) model, because the most cost-effective option can vary between traditional operating expenditure (opex) or capital expenditure (capex) solutions.

Our Systems Thinking approach helps us look holistically at all options, and operating our entire network as a system rather than discrete assets opens up new avenues that otherwise would not have been available.

In a responsible manner

We will only deliver our purpose and create and maintain value for our stakeholders if we act in a responsible manner.

This means protecting and enhancing the natural environment, using natural solutions where possible, and reducing our carbon footprint and waste. It means promoting a safe, healthy and engaging workplace for our employees, supporting their physical and mental health. It drives us to support local communities on issues that matter to them, and to work with local schools and training facilities to promote skills for the future.

Above all, it means we are open, honest and transparent in our dealings and in reporting our performance.

Our core values and culture

These are the fundamental values that drive our decision-making

Customer-focused

Customers are at the heart of everything we do, and we aim to provide a great and resilient service at the most efficient cost.

Innovative

We continually look for new ways to make our services better, safer, faster and cheaper.

Trustworthy

We make promises knowingly and keep them, behaving responsibly towards all of our stakeholders.

Culture at United Utilities

As well as our purpose, strategy and core values, we monitor our culture against key categories relating to our people, such as engagement, health and wellbeing, diversity, and development.

How we operate



Collect - We collect water from open reservoirs, lakes, rivers and boreholes, which we manage in a sustainable way, protecting and enhancing local habitats. We own and manage 56,000 hectares of land, which we open to the public to enjoy access to nature.

Treat - The water we extract needs a lot of work in one of our 88 water treatment works before it is safe and clean for customers to drink. We then store the treated water in covered reservoirs ready to be delivered to customers' taps when they need it.

Deliver - We maintain over 42,000 kilometres of water pipes and deliver an average of 1.8 billion litres of water each day to 7.4 million people across the North West. Our main Haweswater Aqueduct uses gravity to transfer water from Cumbria to Manchester, and our integrated supply network enables us to move water around the region.

Remove - Wastewater from customers' drains and rain water from roads and rooftops flows into our combined sewers to be taken for cleaning. In excessive rainfall, when sewer capacity is overloaded, storm overflows allow rain water, mixed with wastewater, to flow directly into rivers or the sea through a separate pipe to help prevent flooding of streets, homes and businesses.

Clean - We maintain over 78,000 kilometres of wastewater pipes to transport wastewater from sewers to one of our 566 wastewater treatment works, where it requires separation and treatment before it is returned to the natural environment.

Generate - We waste nothing, turning sludge byproduct into compost for farmers and capturing gas to generate renewable energy from bioresources. United Utilities self-generates around 25 per cent of its energy, helping to reduce our carbon footprint and energy costs.

Return - Once the water is clean enough to meet stringent environmental consents, we return it to the natural environment through rivers and streams so that the water cycle can begin again.

Our key resources (the six capitals)

Natural capital

We rely on natural resources to supply water and take back wastewater after treatment, as well as to generate renewable energy.

Human capital

We rely on skilled and engaged employees and suppliers to deliver our services, and skills must be maintained through training and development.

Manufactured capital

We invest to maintain and enhance our assets and build long-term resilience, and we use telemetry to monitor and control many assets remotely.

Financial capital

Efficient financing allows us to preserve intergenerational equity for customers while funding necessary long-term capital investment projects.

Social capital

The constructive relationships we have built with regulators, suppliers, and other stakeholders are fundamental to our ability to deliver our purpose.

Intellectual capital

Innovation helps us continually improve, and understanding performance trends in our network helps us spot potential issues early and fix them proactively.

Our external drivers

Natural environment

We must be resilient to changes such as climate change and population growth, and ensure our impact on the natural environment is positive.

Stakeholders

Our work and the huge areas of land we manage impacts a wide variety of stakeholders and we consult them to help develop and execute our plans.

Technology and innovation

New technology and innovations create opportunities for improvements in service and efficiency, but can also create risks such as cyber-attacks.

Economic environment

The economy impacts our financing through market rate movements such as interest rates and inflation, and our customers' ability to pay their bills.

Regulatory environment

Environmental and drinking water standards set by our regulators drive what we do, both now and in the long term through future market reforms.

Political environment

This includes regional and national politicians as well as policymakers, and we must understand the key policy issues affecting our industry.

Our regulatory environment

To provide great water and more for the North West, we must consider our economic, quality and environmental regulation and create medium and long-term plans that meet the priorities of each of our regulators.

Most customers in England and Wales are served by one of 11 large water and wastewater companies or smaller companies providing only water services.

Our regulated entity, United Utilities Water Limited, is the second largest company as measured by Regulatory Capital Value (RCV). RCV represents the net value of accumulated investment in the company's asset base. We serve over seven million people, with over three million household customers making up around two-thirds of our revenue, and over 200,000 businesses. In the non-household marketplace, we provide wholesale services to retailers.

As a monopoly provider of essential services, we are regulated by various bodies (as set out below), and we are subject to sector-specific legislation alongside this regulation.

Our regulators assess our comparative operating performance against the other water and wastewater companies in England and Wales, with the Drinking Water Inspectorate (DWI) assessing performance in water, the Environment Agency (EA) assessing performance in wastewater, and Ofwat assessing customer satisfaction. Both Ofwat's customer satisfaction assessment and the EA's annual performance assessment are included in our operational key performance indicators (KPIs).

Ofwat sets total revenues, service levels that must be provided, and the incentive package for companies for five-year periods, known as Asset Management Plan periods (AMPs).

These packages are based on Ofwat's methodology, which reflects stakeholder and customer priorities, and are confirmed following detailed scrutiny of business plans proposed by the companies. We must, therefore, engage constructively with Ofwat on future priorities and its methodology development and submit high-quality plans to help ensure we receive a determination that targets the best outcomes for us to continue creating value for customers and all our stakeholders, and effectively incentivises us to continue improving performance.

To ensure our plan is robust and balanced, we consult with customers and other stakeholders (including quality and environmental regulators) and factor in long-term planning and resilience needs.

This was the second year of AMP7, covering the 2020–25 period, and our focus has been on delivering and trying to outperform our final determination through:

- · achieving higher customer satisfaction than our peers;
- beating the outcome delivery incentive (ODI) targets for operational performance;
- delivering efficient total expenditure (totex); and
- raising debt finance at a cost below the industry allowed cost of debt.

Our vision is to be the best UK water and wastewater company, so we regularly benchmark our performance against our peers, and we benchmark our customer service performance against other leading service providers in our region.

Since privatisation, the water industry has invested a significant amount, contributing to improvements in public health and environmental standards, better quality of services, and superior quality drinking water. In its final determinations for AMP7, Ofwat allowed a further £51 billion across the industry to deliver further improvements, and since this, Ofwat has allowed a further £2.7 billion for green economic recovery.

Our regulators

We are subject to regulation of our price and performance by economic, quality and environmental regulators, as shown in the diagram.



* RAPID is a partnership made up of Ofwat, the Environment Agency and DWI.

These bodies exist to help protect the interests of customers and the environment, but they can have competing interests. For example, in agreeing environmental improvements and over what time frame these will be delivered, we must consider how much it will cost and the need to protect customers from bill shocks. Balancing these interests requires open and continuous dialogue.

The regulatory framework can change significantly in the long term and we have seen substantial tightening of laws and regulations since privatisation.

While much is outside our direct control, maintaining good relationships enables us to engage positively with regulators to influence future policy, aiming to achieve the best outcome for all our stakeholders.

The North West

Our purpose is singularly focused on the North West, and what we do is influenced by several key factors that make our region unique. We are committed to understanding and actively responding to these.

Economic factors

We are building resilience to continue serving our growing population and support jobs and the tourism industry.

- 7.4 million population expected to grow significantly in the next 25 years
- 22,700 jobs actively supported by our work, with over 5,000 direct employees
- Tourism relied on by the Lake District, Manchester, Liverpool and coastal areas

Social factors

We are leading the sector on supporting customers with affordability and vulnerability.

- 54 per cent of the most deprived areas in the country
- 47 per cent of households have less than £100 savings to cope with unexpected bills
- 12 per cent of households are affected by water poverty, more than 50 per cent higher than the national average

Environmental factors

We have a long coastline, protected rural areas and dense urban areas, all of which create different demands.

- 30 per cent of land is National Park or Area of Outstanding Natural Beauty or Sites of Special Scientific Interest
- 25 designated coastal bathing waters
- 830mm rainfall each year, higher than the UK average

Engaging with our stakeholders

We actively engage with stakeholders to understand what matters most to them through strong and constructive relationships.

To create longer-term value for all it is essential that we identify and engage with our stakeholders to understand what matters most to them.

We do not operate in isolation and it is not for us alone to determine what the region needs us to deliver. Engaging with stakeholders across the North West enables us to identify shared solutions to shared challenges. We value the diverse perspectives that a broad range of stakeholders, representing different and often competing interests, can bring to our decision-making.

Understanding what matters to stakeholders will only be achieved by building strong, constructive relationships and engaging regularly. This is important to building and maintaining trust. These relationships are subject to robust governance to ensure the insights generated are taken into account in decision-making at executive and board level. The board's corporate responsibility committee meets four times a year, with stakeholder engagement as one of its standing agenda items, and the chair of the independent customer challenge group (YourVoice) attends board meetings to provide its perspective.

Pages 30 to 32 of our United Utilities Group PLC annual report and financial statements detail how we engage with, and are influenced by, each of our key stakeholder groups. Our analysis of what matters most to stakeholders, and how these issues affect our ability to create long-term value, is set out in our material issues matrix on pages 11 and 12.

As shown below, there are nine key stakeholder groups that influence our planning and activities, and six of these groups benefit from the value we create. Our approach to engagement extends across all of these stakeholders.



What matters most to our stakeholders

We continuously challenge ourselves to make sure we understand what matters most regarding our role in society, the impact that we have and the value we create.

Our materiality assessment process

- Define We reviewed current best practice in materiality reporting. The assessment criteria for stakeholder interest and our ability to create value was confirmed. Building on our existing matrix we brought in more stakeholder views and evolved the matrix design. We committed to provide more detailed commentary on the most material issues.
- Engage Views were obtained from across all our stakeholder groups. Insight from consultations
 and data was made available through the engagement processes described on pages 30 to 32 of
 the United Utilities Group PLC Annual Report and Financial Statements. Key internal subject
 matter experts and stakeholder relationship managers provided further insight on issues.
- Assess Comments and data were drawn together to form an initial view of the issues. The
 rationale for issue selection and its significance was presented to senior management for
 discussion. This included potential new issues, removal of issues and movement of existing
 issues.
- 4. Align We cross-referenced and aligned identified issues with our principal risks and uncertainties, as set out on pages 64 to 86. Matrix visuals were then created to easily communicate the prioritisation of issues. For the first time an indication of how issues have moved since the previous review has been included.

Our approach to materiality

Understanding what matters most to our stakeholders is fundamental to being a purpose-driven organisation. We consider these stakeholder priorities alongside our own assessment of what has the biggest impact on the company and its ability to create value, and the output is presented in the material issues matrix.

This stakeholder materiality assessment informs decisions about what we report in documents such as the group's annual report. Setting out issues in this way helps ensure we understand key stakeholder priorities and consider their interests in strategic decision-making, helping us create long-term value.

In defining the strategic relevance of an issue to the company, we have adopted the integrated reporting framework definition of materiality, which states: "a matter is material if it could substantively affect the organisation's ability to create value in the short, medium or long term". Value, in this context, may be created internally (for the company and employees) and there can be external value (for customers, communities, investors, suppliers and the environment). Value may be financial or non-financial.

Our 2021/22 assessment

This year we carried out a thorough review of our material issues and matrix design.

Striking the right balance between different interests and views is not easy but our assessment process consolidated feedback based on a balance of views obtained from all our stakeholders.

The assessment process identified 28 material issues. More information about the most material issues can be found on pages 36 to 39 of the United Utilities Group PLC Annual Report and Financial Statements, where we describe the issue, provide our response to managing the issue, explain how the issue links to our strategic themes and how it is included in our plans for the future.

Issues are plotted on the matrix from lower to higher in terms of level of interest to stakeholders and how much it can affect our ability to create value.

Our approach has been reviewed by responsible business consultancy Corporate Citizenship, which commented that "United Utilities has set out the orderly, balanced and comprehensive process by which it has arrived at its refreshed materiality assessment. The detailed coverage of the six most material issues fosters public understanding. It sets out the links to strategic themes, risks and future actions. It shows how United Utilities recognises the most important issues and acts upon them".

Material issues matrix



Issue with decreased significance
 N New issue in 2021/22 assessment

Effect on our ability to create value Based on the potential effect on our ability to create value over the short, medium and long term. Value can be created for United Utilities and our stakeholders. Value can be financial and non-financial.

Material issue Movement relative to Material issue Movement relative to previous review Health, safety and wellbeing Trust, transparency and legitimacy North West regional economy Resilience 1 Land management, access and Customer service and operational recreation performance Climate change Sewage sludge to land **Energy management** 6 Political and regulatory environment Environmental impacts 6 Affordability and vulnerability Data security Drinking water quality Sewer flooding and storm overflows
 Water resources and leakage Diverse and skilled workforce Responsible supply chain Employee engagement Financial risk management Supporting communities Corporate governance and business Competitive markets conduct COVID-19 Nature capital and biodiversity Human rights Innovation Cyber security

S172(1) Statement

Our key decisions during the year to 31 March 2022.

Throughout the United Utilities Group PLC Annual Report and Financial Statements, we provide examples of how we have thought about the likely consequences of long-term decisions and how we:

- build relationships with stakeholders and balance their needs and expectations with those of the business:
- understand the importance of engaging with our employees;
- understand the impact of our operations on the communities in our region and the environment we depend upon;
- are mindful of the interactions we have with our regulators; and
- understand the importance of behaving responsibly and being consistent with the company's purpose, vision and values.

Statement by the directors in performance of their statutory duties in accordance with S172(1) Companies Act 2006

The board of directors of United Utilities Group PLC consider, both individually and together, that they have acted in the way they consider, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole and having regard (amongst other matters) to factors (a) to (f) s172 Companies Act 2006, in the decisions taken during the year ended 31 March 2022 including:

Haweswater Aqueduct Resilience Programme

The decision

In December 2021, the board agreed delivery of the replacement of six of the existing tunnel sections of the Haweswater Aqueduct (the aqueduct) and connections to existing multiline siphons between the tunnel sections and associated facilities had the potential to be delivered as a Direct Procurement for Customers (DPC) project rather than through the traditional UUW procurement route. Under DPC the CAP¹ will be responsible for the detailed design and build of the project and, crucially, for securing the project finance. The CAP will also be responsible for maintaining and inspecting the new tunnels for a period of 25 years post construction. In November 2020, the replacement of the Hallbank section of the aqueduct was successfully completed by UUW, which was delivered via a traditional approach working with a design and build contractor.

How we engaged with stakeholders

Our regulator, Ofwat, has introduced the new DPC approach for companies to consider when delivering large infrastructure projects. (More information on the DPC approach can be found on Ofwat's website.) Ofwat 'believe that by outsourcing the delivery of infrastructure projects using DPC, water companies can achieve significant benefits for customers. This includes both through innovation and lower whole life costs of the project'. The company has been working with Ofwat on developing the detail of the DPC approach for this complex project since proposing the delivery of HARP via DPC in its AMP7 business plan.

In developing this project, we have sought customers' views and worked with their representatives through YourVoice to develop a solution to balance risk reduction and the cost of delivery. We have completed initial design work and submitted all planning applications taking into account impacts on local communities and the environment, and have sought to minimise this as much as possible. We have actively engaged stakeholders through the planning process, undertaking extensive public engagement

¹ CAP means a limited company which has been competitively appointed to be the provider in accordance with a DPC Procurement Process in respect of a DPC Delivered Project

including an innovative 'virtual public exhibition' when face-to-face interactions were restricted due to the pandemic. We have also completed environmental impact assessments and are seeking a ten per cent biodiversity net gain from the project.

Read more at ofwat.gov.uk/regulated-companies/markets/directprocurement/direct-procurement-forcustomers/

The board's view

The aqueduct is a critical asset in being able to deliver our purpose to provide great water and more for the North West. It is a major part of our water supply network serving our customers in parts of Cumbria, Lancashire and Greater Manchester. The board does not underestimate the complexities of the project to replace six sections of tunnel in some remote stretches of countryside and with sections of the tunnel at a depth of up to 370 metres. As well as the technical challenges, the complexities of the new and untested DPC approach have added to the challenge of a project estimated to require investment of over £1 billion and take circa 9–10 years to complete.

The board has been kept fully apprised of progress at key stages of the project through regular presentations at board meetings, 'deep-dive' sessions and as part of strategy discussions.

The board approved the submission of the Outline Business Case to Ofwat under DPC having evaluated and considered the DPC approach and identified, and sought to mitigate as far as possible, the known and likely risks associated with the DPC approach. The board is cognisant of the many challenges ahead including amongst other things: the appointment of the CAP through a new DPC tender process, the implications for the group of the different commercial construct and financing of the project, and the critical nature of the aqueduct to the business.

Under the current circumstances, the board considers that the DPC delivery approach has the potential to be most likely to promote the long-term success of the company for the benefit of its members as a whole. This is based on the information currently available, which suggests that the DPC route has the potential to offer the best value for customers and, therefore, supports the position that this should be tested through the market through progressing HARP through a DPC procurement process.

In April 2022, Ofwat gave its consent for UUW to procure HARP through a DPC procurement process under Condition U of its licence.

Hybrid working

The decision

The COVID-19 pandemic has changed the world of work. United Utilities is an organisation where, prepandemic, the majority of our employees routinely travelled to work on a daily basis to attend one of the group's offices or sites. As the pandemic progressed, the need to evolve our ways of working to face the future became evident. The board was fully involved in the development of the group's next ways of working, including the pilot project prior to rolling out the hybrid way of working for roles which fulfilled specific criteria within the organisation.

How we engaged with stakeholders

Weekly online webinars were established during the early stages of the pandemic in order to communicate with line managers prior to the cascade of information to their teams, and with these resources being made available to all employees via the intranet. Our Employee Voice panel has been a valuable mechanism for employees to provide feedback, particularly on how they felt they have been supported during the pandemic. Over 1,000 employees, including those based out in the field or at one of our many operational sites, provided their views, which were taken into account when formulating the plans for our next ways of working. Feedback from the teams involved in the pilot project have helped shape our current approach to hybrid working.

The board's view

Our employees are fundamental to fulfilling our purpose of providing great water and more for the North West. We have seen a number of positive benefits relating to work during the pandemic including: reductions in employee sickness absences; improvements in engagement and wellbeing; improvements in operational performance; and reduced travel costs and carbon emissions. Increased hybrid working provides opportunities including: the ability to attract employees from a wider and potentially more diverse talent pool; being the catalyst to improve our digital capabilities and in time shape the workplace of the future; and potentially make savings on accommodation.

Our plans have seen 2,000 employees adopting hybrid ways of working. In terms of the non-hybrid roles which are typically directly supporting our customers and critical operations, we are continuing to look at providing additional flexible opportunities and changing workplace practices to retain, attract and stay aligned to the employment market. The board concluded that the incorporation of a hybrid way of working alongside the traditional approach would be most likely to promote the long-term success of the company for the benefit of its members as a whole. This way of working will be monitored closely to ensure it remains efficient and effective.

River health

The decision

The group has committed to deliver £230 million in environmental improvements within our base capital programme, supporting at least a one-third sustainable reduction in the number of spills recorded from our storm overflows by 2025 compared to the 2020 baseline, leading to 184 kilometres of improved waterways across the region.

How we engaged with stakeholders

There has been much negative press coverage regarding river health and bathing water quality aimed primarily at the wastewater sector, with the Environment Agency (EA) and Ofwat currently investigating whether wastewater companies' treatment works have been operated in line with their environmental permits. We have written to all our stakeholders including the EA, Ofwat, The Consumer Council for Water and MPs in our region. We announced that we would be launching a community fund to support local rivers initiatives, work alongside The Rivers Trust, RSPB and local authorities to deliver projects, and launch a new partnership to protect watercourses with farmers to incentivise farming practices that reduce impact to river health.

The board's view

The group has co-operated fully with the EA/Ofwat investigation. The board is cognisant that United Utilities needs to do more to play its part in improving river health in the North West, and amongst other things, we will:

- aim to publish investigations and plans for all overflows that operate frequently;
- ensure all storm overflows are monitored by 2023;
- aim to provide near real-time data when an overflow operates and ensure this data is easily accessible by 2023;
- aim to deliver a significant reduction in impact caused by storm overflows and sewage treatment works by 2030; and
- aim for there to be no serious pollution incidents from our assets.

The board, in committing to playing its part in improving river health, believes this would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

Non-financial information statement

The table below constitutes the company's non-financial information statement, produced to comply with sections 414CA(1) and 414CB(1) of the Companies Act 2006. Our purpose-driven approach, as described on pages 3 to 4, sets out how we act as a responsible business and is applicable to the areas of disclosure required by s414CB(1). The performance tables we publish for each stakeholder that we create value for, so that we can demonstrate we are fulfilling our purpose (see pages 52 to 75 of the United Utilities Group PLC Annual Report and Financial Statements), include data in relation to the areas of disclosure required by s414CB(1).

Read more about our purpose on our website at: unitedutilities.com/corporate/about-us/what-we-do/our-vision

The UUPLC board supports the UUG board and therefore the below non-financial information statement should be read in conjunction with the UUG 2022 Annual Report and Financial Statements. Page references in the below table are to the relevant areas of the UUG 2022 Annual Report and financial statements.

Reporting requirement	Information necessary to understand our business and its impact; policies and due diligence activities; and outcomes	Policies, guidance and standards which govern our approach (some of which are only published internally)
Environmental matters	Reflecting the needs of the environment: Natural resources – see page 24 Natural environment – see pages 26 and 31 Reducing our carbon footprint – see pages 86 to 97	 Waste and resource use policy Environmental policy – see the responsibility pages on our website Water Resources Management Plan – see page 48 Emissions target – see pages 86 to 97
Employees	Reflecting the needs of our employees: • Health and safety – see page 62 • Mental wellbeing – see pages 61 to 62 • Competitive base salaries and benefits – see page 183 • Gender pay report 2021 – see page 44 • Engagement – see pages 7, 30, 60 to 62 and 196 • Board diversity – see pages 133 to 134	 Health and safety policy Mental wellbeing policy Equality, diversity and inclusion policy Flexible working arrangements Agency worker policy Human rights policy – see page 36 Board diversity policy – see pages 133 to 134
Respect for human rights	Reflecting the needs of our stakeholders: • Suppliers – see page 31 • Diversity within our workforce – see pages 7, 44 to 45, 60 to 63, 133 to 134, and 137 to 138	 Employee data protection policy Slavery and human trafficking statement Human rights policy – see page 36
Social matters	Reflecting the needs of our stakeholders: Customers – see page 30 Communities – see page 30 Environment – see pages 31 and 86 Suppliers – see page 31 Regulators – see page 32	 YourVoice – see page 29 Charitable matched funding guidance Volunteering policy United Supply Chain – see pages 36 and 73 Commercial procurement policy
Anti-corruption and anti-bribery	Reflecting the needs of employees and suppliers: • Employees – see pages 61 and 154 • Suppliers – see page 73	 Anti-bribery policy Fraud investigation and reporting processes Whistleblowing policy Internal financial control processes Commercial procurement policy

Our approach

Systems Thinking

Our Systems Thinking approach enables us to better manage our end-to-end water and wastewater systems, optimising our decision-making and helping us move away from the traditional reactive approach to address problems proactively before they affect customers. This creates long-term value, improving our asset reliability and resilience, reducing unplanned service interruptions, and delivering cost savings.

We assess new opportunities against five capability maturity levels. At the lower levels there is a high degree of human intervention and reactive behaviour. At the higher levels there is a high degree of predictive analytics, use of artificial intelligence to process vast amounts of data, joined up decision-making across the system, and higher levels of automation. It requires time and investment to reach the higher levels, and we are at different levels in different areas of our business as we continue to embed and progress our approach.

Systems Thinking involves looking at the entire system and all of its linkages, rather than individual assets or sites in isolation, to find the best all-round solutions. Our digital backbone sends vast amounts of real-time data to our Integrated Control Centre (ICC), from which we plan, monitor and control our operations. We also factor in other source data such as weather forecasts and customer demand, and at the higher capability maturity levels we use artificial intelligence and machine-learning to identify trends and anomalies that could signal potential issues.

Diversity and inclusion

We want our workforce to reflect the communities we serve by reaching and recruiting from every part of our community, and we want all employees to feel valued and included, regardless of their gender, age, race, disability, sexuality or social background.

Our customer services and people director sponsors our overall diversity and inclusion plan and tracks its progress with the executive team. We have completed a further maturity audit with our specialist inclusion partner, the Clear Company, who has independently measured progress against our plans and recognised our strong focus on education.

We again ranked in the top 1 per cent of over 850 companies across Europe in the Financial Times' Statista Survey for Diversity and Inclusion Leadership, and were the leading utility company in the Top 50 Inclusive UK Employers Index. We have been included in the Bloomberg Gender Equality Index 2022, showing our commitment to more equal and inclusive workplaces.

More information on diversity and inclusion across the business can be found on ages 44 and 45 of the United Utilities Group PLC Annual Report and Financial Statements.

How we plan for the future

Our approach and long, medium and short-term planning horizons help us continue fulfilling our purpose in a sustainable and resilient way.

We take an integrated approach to everything we do. To help us create and prioritise our plans, we consider:

- what the material issues are, both in terms of the level of interest to stakeholders and the effect they may have on our ability to create value;
- our assessment of principal risks and uncertainties;
- our environmental, social and governance (ESG) commitments; and
- how our plans will fit with our Systems Thinking approach.

We undertake planning for long, medium and short-term horizons.

Long-term (25+ years) planning helps us identify what we need to do to address challenges and opportunities that may arise, building resilience so that we can ensure we are able to provide our essential services to customers far into the future.

These long-term plans influence our medium-term (five to ten years) planning, which sets out how we will deliver the commitments of our final determination for each regulatory period, as well as our non-regulatory activities.

Short-term (one year) planning enables us to monitor and measure progress against our five-year plans and regulatory targets. We retain flexibility in our one-year plans to meet our five-year targets in the most effective and efficient way as circumstances change.



Long-term planning (25+ years)

Our approach to long-term planning ensures we are responding to challenges and opportunities that may arise far into the future.

To maintain a reliable, high-quality service for customers far into the future, we have to look a long way ahead to anticipate and plan for the changes and core issues that are likely to impact on our activities.

This involves looking at a lot of current and predictive data from various sources, such as economic forecasts, expectations for population growth, climate and weather predictions, legal and regulatory consultations and changes, as well as the age and condition of our assets, and keeping track of innovations and technological advancements. We review this information as part of our long-term planning and risk management processes.

Over the next 25+ years we have identified many challenges and opportunities that we are likely to be faced with, including:

- Climate change;
- · Population growth;
- A more open, competitive market;
- Water trading;
- More stringent environmental regulations;
- Developments in technology; and
- Combining affordable bills with a modern, responsive service.

There is a section of our website dealing with our future plans, where we examine these challenges and how we will focus our resources and talents to meet them.

Our 25-year Water Resources Management Plan (WRMP) covering the 2020–45 period, was developed and published in 2019 following consultation with stakeholders. We will publish our new WRMP in 2024 covering the next period.

Our last Drought Plan was published in 2018. We have a new draft on which we have consulted with stakeholders, and the final plan will be made available on our website once approved by Defra and the Environment Agency.

We will publish a Drainage and Wastewater Management Plan (DWMP) for the first time in 2024, and more information will be made available on our website as we launch this.

These long-term plans set out the investment needed to ensure we have sufficient water to continue supplying our customers, taking into account the potential impact of climate change, the actions we will take to manage the risk of a drought, and the risks around flooding, pollution, storm overflows, and wastewater treatment.

We create long-term value for stakeholders by:

- Systems Thinking and innovation;
- long-term planning and responding to challenges and opportunities;
- sustainable catchment management;
- disciplined investment, based on a sustainable whole-life cost modelling approach, to ensure the resilience of our assets and network;
- investing in our employees to maintain a skilled, healthy and motivated workforce;
- · close collaboration with suppliers; and
- maintaining a robust and appropriate mix of debt and equity financing.

Read more at: unitedutilities.com/corporate/about-us/our-future-plans

Medium-term planning (5-10 years)

Our medium-term planning aligns with delivery of our plans as set out in Ofwat's final determination.

The majority of the group's activities sit within our regulated water and wastewater business, therefore, our medium-term planning predominantly sets out how we will deliver against the final determination (FD) we receive from Ofwat for each five-year period. Historically, we have submitted business plans which were focused mainly on the subsequent five-year asset management plan (AMP) period, while providing a high level view of the following AMP. This provided medium-term planning visibility of between five and ten years at any one point in time, although Ofwat is proposing a longer-term planning approach for the next business plan submission in 2023.

It is important that our plans deliver for all stakeholders including customer preferences and environmental requirements. We, therefore, align our plans to these priorities in line with key published methodologies in order to deliver the best overall approach to stakeholder value.

Our business plans are designed to help us work towards our long-term plans, build and maintain resilience, and ultimately fulfil our purpose. We engage in extensive research to ensure the plans we put forward are robust and balanced, targeting the best overall outcomes for all our stakeholders.

Following scrutiny and challenge from Ofwat, we receive the final determination (FD), which sets the price (in terms of total expenditure and customer bills), level of service, and incentive package that we must deliver over the five-year period, and an allowed return we can earn.

Our business plan submission for 2020–25 was awarded fast-track status by Ofwat and we were given one of the lowest cost challenges in the sector, reflecting the efficient total expenditure (totex) proposals we put forward.

The acceleration of our capital programme during the 2015–20 period helped us deliver improvements early and we are adopting the same strategy in this regulatory period, with around £500 million of total expenditure brought forward over the first three years of the AMP, helping us make a strong start to our 2020–25 plans.

Our total expenditure for this period will be extended by £765 million beyond the scope of the FD, with this investment delivering improvements in environmental performance, accelerating delivery of the new Environment Act, and providing an enhanced level of service that will deliver better performance against customer outcome delivery incentives (ODIs).

Our strategy helps us create value for our stakeholders by delivering or outperforming the FD. Since 2015, we have published an annual performance report (APR), which reports our regulatory performance in a format that helps customers and other stakeholders understand it and compare it with other companies in the sector. This includes reporting of Return on Regulated Equity (RoRE), which comprises the base allowed return and any out/underperformance, on an annual and cumulative basis for each AMP.

Our APR is published in July each year at: unitedutilities.com/corporate/about-us/performance/annual-performancereport

Information on companies' regulatory performance can be found at: discoverwater.co.uk

Short-term planning (1 year)

In the short term we set annual, measurable targets, but we retain flexibility to enable us to respond to challenges that may arise.

Short-term planning helps us work towards our medium and long-term goals and provides us with measurable targets so that we can continually monitor and assess our progress, which helps us ensure the long-term resilience and sustainability of our business.

Before the start of each financial year, which runs from 1 April to 31 March, we develop a business plan for that year, and this is reviewed and approved by the board. This business plan sets our annual targets, which are designed to help deliver further improvements in service delivery and efficiency, and to help move us towards achievement of our five-year and longer-term goals.

Performance against these annual targets determines the annual bonus percentage that is awarded. Executive directors and employees right through the organisation are remunerated against these same bonus targets.

As well as these annual bonus targets, in order to avoid encouragement of short-term decision-making and ensure management is focused on the long-term performance of the company, executive directors are remunerated through long-term incentive plans (LTP). The LTP assesses three-year performance, and is measured during the 2020–25 period through RoRE and a basket of customer measures.

See details of the annual bonus and Long Term Plan arrangements on pages 178 to 182 of the United Utilities Group PLC Annual Report and Financial Statements.

The executive directors hold quarterly business review meetings with senior managers across the business to monitor and assess performance against our annual targets, helping to ensure that we are on track to deliver our targets for the year, and longer term.

It is vital that we retain flexibility within this short-term planning so we can adapt to meet challenges that may arise during each year, and deliver high-quality and resilient services to customers in the most effective and cost-efficient way possible. This may involve bringing enhancements forward to deliver improvements for customers early, investing further into the business to maintain service, or delaying projects to occur later in the regulatory period in order to prioritise expenditure and allow our people to spend their time dealing with any unexpected challenges that arise.

The challenges presented by COVID-19 were a clear example of why this flexibility is crucial. We enacted our robust contingency plans, enabling us to quickly and efficiently move thousands of our people to home working and introduce additional safeguarding measures for those that remained on sites or in the field, while maintaining reliable water and wastewater services that were especially critical for public health at this time.

How we measure our performance

To measure progress on delivering our purpose and creating value for our stakeholders, we monitor and measure our performance against each of the stakeholder groups that we create value for.

Our key performance indicators

We measure our performance against a selection of key performance indicators (KPIs), both operational and financial. These are unchanged from last year.

Bonuses (for executive directors and employees right through the business) and long-term incentives for executive directors, are closely aligned to many of our operational and financial KPIs.

Operational KPIs - Our purpose drives us to create long-term value for all our stakeholders, and we report against one operational KPI for each of the six stakeholders for whom we create value. More detail on these operational KPIs, including our targets and performance this year, can be seen on pages 23 to 27.

Financial KPIs - We have selected financial KPIs that assess both profitability and sustainability of our business from a financial perspective. These are monitored and measured at the UUG level.

More detail on these financial KPIs, including our targets and performance this year, can be seen on pages 10 to 11 of the UUG 2022 Annual Report and financial statements.

Our other performance indicators

Our KPIs are by no means the only metrics by which we monitor and assess our performance. We report against many other metrics both internally and externally. As discussed on pages 29 to 33 of the UUG 2022 Annual Report and Financial Statements, our stakeholder engagement gives us a view of what matters most to them. We report on a selection of other metrics on pages 52 to 75 of the UUG 2022 Annual Report and Financial Statements, based on the measures shown to be of highest interest to our stakeholders.

For example, on performance for customers, our KPI is Ofwat's measure of customer experience, C-MeX, but we also report on Ofwat's measure of developer satisfaction, D-MeX, the level of customer complaints, vulnerability support, customers lifted out of water poverty, and the impact of water efficiency measures.

We regularly report on numerous corporate responsibility performance measures on our external website as detailed on page 50 of the UUG 2022 Annual Report and Financial Statements.

All these performance indicators have received an appropriate level of assurance, such as independent third-party verification, regulatory reporting assurance processes, or through our own internal audit team.

Our Annual Performance Report (APR)

Performance against our regulatory contract is monitored and assessed each year, and reported within the annual performance report (APR), as required by our economic regulator Ofwat.

We cover several regulatory performance measures within this report. Our APR provides more details, as well as further narrative, about our regulatory performance during the year.

There is financial information contained within the APR. This relates only to the regulated company and its appointed activities, and is calculated in accordance with the regulatory accounting framework. This differs from IFRS reporting, and a reconciliation to IFRS reporting is provided in the APR.

Our APRs for previous years are available on our external website, at: unitedutilities.com/corporate/about-us/performance/annualperformance-report and the APR for 2021/22 will be published in July 2022.

Operational performance

We are helping over 200,000 households currently struggling with their bills, and maintaining a high level of service for customers. We are earning higher outperformance thanks to strong operational performance against customer outcome delivery incentives as well as financial outperformance. As a responsible company we are sharing our success with customers, like we did in 2010-20, by investing an additional £765 million to help accelerate further enhancements for customers and the environment.

Our team has sustained a strong level of operational performance this year, delivering value for all our stakeholders. Customer satisfaction and employee engagement remain high, and we have achieved our best ever performance against customer outcome delivery incentives (ODIs). We are on track to deliver our AMP7 environmental improvement programme, which will improve river and bathing water quality in the North West, and have made good progress against our carbon pledges. We are upper quartile across a suite of environmental, social and governance (ESG) indices, and our robust balance sheet provides long-term financial resilience.

Helping customers struggling with bills

Many people across the country are facing real challenges as we emerge from a global pandemic and are faced with significant rises in the cost of living. We serve many of the most deprived areas in England and Wales, so it is more important than ever that we are doing what we can to help customers.

Our average household bill for 2022/23 is not increasing, and we are offering more support than ever before through our extensive range of affordability and vulnerability schemes, helping over 200,000 households this year and providing around £280 million² of affordability support over AMP7.

There is still more we would like to be able to do, and we are a passionate supporter of the Consumer Council for Water's drive to introduce a national social tariff, which would help deliver a more equitable sharing of support for customers struggling to pay their bill regardless of where they live in the country.

Sustained high levels of operational and environmental performance

We were a sector leading company on outcome delivery in Ofwat's Service Delivery Report for 2020/21, with nine of 11 outcomes³ being at or better than target, and were recognised as a top performer on supply interruptions and pollution incidents – two areas where we are now seeing the benefits of targeted investment we made in AMP6. On the two1 outcomes where our performance was below target we have plans in place to improve this.

Our customer ODI performance has been strong across the board this year, meeting or beating over 80 per cent of our performance commitments. Based on our anticipated reward this year, we will have earned rewards in both the first two years of AMP7 against Ofwat's customer satisfaction measure, C-MeX, and we have achieved our lowest ever level of written complaints this year.

² 50 per cent company funded

³ Excluding per capita consumption, which Ofwat will be revisiting at the next price review once there is a better understanding of the impact of COVID 19 and any enduring effects

We were pleased to achieve a four star rating in the 2020 Environmental Performance Assessment from the Environment Agency (EA), meaning we were categorised as an industry leading company in the most recent annual assessment by the EA, taking into account performance across a broad range of environmental metrics. It reflected our best ever performance, and we were the first water company to achieve green status across all measures since 2015.

We continue to be at the sector frontier on pollution performance, having reduced overall pollution by a third since the start of the AMP. Our treatment works compliance remains strong and we expect to remain green on this measure in the EA's assessment for 2021.

Performance improvements earning outperformance

We earned a reported return on regulated equity (RoRE) of 7.9 per cent⁴ for 2021/22, driven by our continued improvements in operational performance together with high levels of inflation, which increases financing outperformance, and tax outperformance. Underlying RoRE is slightly lower at 7.7 per cent, and excludes the tax that will be recovered through the regulatory sharing mechanism. Cumulative RoRE for the first two years of AMP7 is 6.2 per cent on both a reported and underlying basis.

Our strong performance this year earned a £25 million⁵ reward against customer ODIs, the highest annual reward we have achieved to date. We anticipate earning total customer ODI rewards over AMP7 of £200 million, a third higher than we estimated in last year's report.

We consistently issue debt at efficient rates, and we earned financing outperformance of 1.6 per cent of regulated equity this year. We also performed strongly on tax as a result of optimising government tax incentives.

The economic environment as we emerge from a global pandemic, as well as the war in Ukraine, has driven higher costs in our supply chain and we are starting to see significant cost increases in power and chemicals. We continue to seek efficiencies and exploit technology and innovation to help us deliver our total expenditure (totex) efficiently.

Sharing our success with customers

As a responsible company it is right that we should share our success with customers, and we feel the best way for us to create more value for customers and other stakeholders is through investing to accelerate improvements in performance. This is in line with the approach we have taken historically, sharing over £600 million over the 2010-20 period.

We have increased the investment we are making by a further £400 million meaning that, over the 2020–25 period, we are investing £765 million beyond the scope of our final determination allowance to help us accelerate environmental and customer outcomes.

Investing to improve service for customers

£250 million of the additional investment is helping us deliver further improvements to service for customers and better performance against our customer ODIs.

⁴ On a real, RPI/CPIH blended basis

⁵ Excluding per capita consumption, which Ofwat will be revisiting at the next price review once there is a better understanding of the impact of COVID 19 and any enduring effects

As mentioned above, our performance has been strong across the majority of our customer outcomes, but this investment is targeted at delivering sustainable improvements for customers in two specific areas where we want to do better – sewer flooding and water quality (specifically discolouration).

It includes investment in Dynamic Network Management (DNM), an advancement of Systems Thinking in our wastewater network that will help us reduce sewer flooding and pollution incidents using real-time performance data from a network of sensors to enable predictive and preventative optimisation.

Investing outperformance for environmental improvements

A further £250 million of the additional investment is being used to deliver environmental outcomes. This includes delivering elements of the new Environment Act requirements earlier, and improving the health of rivers across the North West.

In July 2021, we launched a collaborative partnership with The Rivers Trust, a first for any water company in the United Kingdom. To help kickstart a river revival in the North West we published 'Better Rivers: Better North West', our plan to improve the health of rivers across our region in the next three years. We are delivering improvements that support at least a one-third sustainable reduction in the number of spills recorded from our storm overflows between 2020 and 2025, with all storm overflows monitored by 2023 and real time data on their operation made publicly available. Our plans will lead to 184 kilometres of improved waterways across the region. We also continue to engage with the ongoing industry-wide investigations by Ofwat and the Environment Agency into possible unpermitted sewage discharges.

The remaining £265 million of the £765 million of additional investment is for projects where regulatory allowances and mechanisms have been secured, much of which will deliver further environmental benefits. For example, around £90 million will fund a project in Bolton that is part of our Water Industry National Environment Programme (WINEP), and £65 million will go towards supporting the country's green economic recovery in the wake of the pandemic.

Long-term investment needs for the environment

Protecting and enhancing the natural environment has always been a key priority for us and many of our stakeholders. In the last 12 months this has received increased public interest, particularly the health of rivers and the part the water industry can play in helping to improve this.

New and emerging requirements reflect the increased importance being given by the Government to the environmental agenda and we share the Government's ambitious improvement plans.

The Environment Act 2021 introduces several new challenges for the sector, including a requirement for water companies to secure a progressive but very substantial reduction in the average number of spills from storm overflows, and controlling nutrient pollution by reducing phosphate release from wastewater treatment works. The Industrial Emissions Directive broadens the scope of activities covered by compliance requirements, and the Environment Agency's recent interpretation of Farming Rules for Water restricts the application of biosolids to land in certain areas at certain times, requiring more storage capacity or alternative means of disposal.

We have delivered significant improvements in environmental performance in recent years, and through our original plans for AMP7 we will deliver further improvements, with good progress already having been made. The additional investment we are making will help accelerate improvements, but there is more that the industry will need to do.

Specific targets for the next regulatory period have not yet been agreed, but it is already clear that there is an ambition to deliver a fundamental change in the way drainage network systems were originally configured. The investment needed to deliver these changes will be significant for the industry as a whole, but particularly for the North West, where we have a much higher proportion of combined

sewers. We are working with the Government and regulators to determine how these bold ambitions can be met and by when, recognising that the pace of change must consider customer affordability.

Resilience to climate change and population growth remains a material issue for many stakeholders, even more so since COP26, and this is something that will need to be addressed by water companies both regionally and nationally. Our Systems Thinking approach and investment are helping to deliver increased resilience across the North West, and longer-term we are involved in strategic planning for a national water transfer scheme.

We have committed to achieve net zero by 2030 with six pledges to reduce our carbon footprint, underpinned by ambitious science-based targets for reducing our greenhouse gas emissions, and we are making good progress against these. We are linking executive remuneration more tightly to our carbon commitments with four targets added to the Long Term Plan, and in this year's report we also include nature-related financial disclosures.

Haweswater Aqueduct Resilience Programme (HARP)

We have continued to develop HARP, an industry-first Direct Procurement for Customers (DPC) programme to design and build six replacement tunnel sections of the Haweswater Aqueduct, which transports water from Cumbria to Manchester.

We have undertaken extensive market engagement throughout the process – challenging for a project of this scale during the pandemic – and used innovative ways to manage stakeholder engagement including the use of digital channels and a virtual exhibition giving people access to information and the ability to ask questions remotely.

We developed the initial design following extensive ground investigation work to plot the best route, and planning applications have all been submitted with decisions expected later this year. During early 2022, we have been finalising tender documents, and we expect to start procurement in the summer of 2022.

Supported by a diverse and highly motivated workforce

We pride ourselves on being a quality employer, and are committed to maintaining a diverse and inclusive team of people, recruiting from every part of our community. We scored equal to the UK high performance norm with 87 per cent employee engagement this year, are rated 4.6 out of five by Glassdoor, and were the leading utility company in The Inclusive Top 50 UK Employers List 2021/22.

We believe in the importance of developing younger generations to keep the talent pool flowing. We have active graduate and apprentice schemes, including 30 green apprentices helping us work towards our climate and environmental ambitions. We support young people not in education, employment or training (NEETs), as well as being part of the government's Kickstart scheme providing opportunities to unemployed 16-24 year olds claiming universal credit.

Our commitment to health, safety and wellbeing has been recognised with our 10th consecutive Royal Society for the Prevention of Accidents (RoSPA) gold standard medal, meaning we have achieved the RoSPA President's award.

Thank you to our stakeholders

We are grateful to our employees for their continued hard work, and as we look forward at the many new challenges we and the rest of the sector will be meeting in the next AMP and beyond, we are delighted to have such a great team behind us. We would also like to extend our gratitude to our customers and other stakeholders for their continued support.

Our key performance indicators (KPIs)

Our purpose, to provide great water and more for the North West, means we aim to create long-term value for all our stakeholders and, as such, for AMP7 we are reporting against operational KPIs that are linked to each stakeholder group for whom we create value. Our performance against these operational KPIs is reported below.

Communities - Our key performance indicator to measure value created for communities over AMP7 is the level of community investment, and we target increasing this by at least 10 per cent over 2020 to 2025, compared with the average of £2.56 million per annum between 2010 and 2020. This year, our direct community investment was £2.8 million (calculated using the B4SI method).

Customers - Our key performance indicator to measure customer satisfaction over AMP7 is Ofwat's customer measure of experience (C-MeX), in which we target being in positive reward territory. In 2021/22 we expect to earn a £2.3 million reward and we continue to be the highest performing listed company.

Employees - Our key performance indicator to measure value created for our employees over AMP7 is our engagement score, in which we target being upper quartile against the UK Utilities Norm benchmark. Our overall engagement is at 87 per cent, 5 per cent higher than the UK Utilities Norm and equal to UK High Performance levels, which we have now been equal to or above for the last three years.

Environment - Our key performance indicator to measure value created for the environment over AMP7 is our performance against the Environment Agency's annual performance assessment, in which we target being an upper quartile performer. The most recent assessment was for 2020, in which we achieved our best ever performance, green across all measures – the first water company to achieve this level of performance since 2015 – and were awarded the maximum 4 star industry leading company status. The Environment Agency will publish its annual performance assessment for 2021 in July 2022.

Investors - Our key performance indicator to measure value created for our investors over AMP7 is Return on Regulated Equity (RoRE), and we will update our targets for individual components of this measure as we progress through the period. Reported RoRE for 2021/22 was 7.9 per cent on a real, RPI/CPIH blended basis, double the base return. Underlying RoRE was slightly lower at 7.7 per cent, and excludes the tax that will be recovered through the regulatory sharing mechanism.

Suppliers - Our key performance indicator to measure value created for our suppliers over AMP7 is payment within 60 days, and we target at least 95 per cent of invoices to be paid within this timeframe. In 2021/22, we have continued to exceed our target performance, with over 99 per cent of our invoices paid within 60 days, and our average time to pay is 13 days.

Financial KPIs – We monitor six financial key performance indicators (underlying operating profit, underlying earnings per share, dividend per share, gearing, total shareholder return, and a low dependency pension scheme), for which we set targets and assess performance at the UUG level. As United Utilities PLC comprises the same subsidiaries as UUG, the company KPIs are aligned to those of UUG and the outcomes are materially the same. We met our expectation/target on five of these six measures, being close to meeting our expectation/target on total shareholder return as UUG's total shareholder return was higher than the FTSE 100 average but not as high as some listed peers in the utility sector. More detail on these KPIs can be found on pages 10 and 11 of the UUG 2022 Annual Report and financial statements.

Financial performance

Revenue for the year to 31 March 2022 increased by 3 per cent, mainly driven by higher non-household consumption as business activity has returned to pre-pandemic levels. Household bad debt has returned to 1.8 per cent of regulated revenue, lower than the 2.2 per cent last year and consistent with the level we were achieving prior to the pandemic, helped by our wide ranging affordability schemes and effective approach to managing cash collection. Operating profit was up £8 million as the increase in revenue was largely offset by inflationary increases in power and other core costs.

While inflation has increased our operating costs and net finance expense this year, it has also led to a higher level of financing outperformance and, together with the £765 million additional investment we have announced beyond the scope of our final determination, will deliver higher regulatory capital value (RCV) growth over the 2020-25 period.

We have doubled our base return on regulated equity (RoRE) for 2021/22, delivering strong performance on financing, tax and customer ODIs.

We benefit from having one of the strongest balance sheets in the sector, with an industry-leading, fully funded pension scheme on a low dependency basis, a low level of customer debtor risk, and RCV gearing supporting a stable A3 credit rating with Moody's.

Revenue

	£m
Year to 31 March 2021	1,808.0
Regulatory revenue changes -1.5 per cent real reduction in allowed wholesale revenues and 0.6 per cent uplift in line with CPIH inflation	(13.5)
Non-household consumption increase	105.9
Household consumption decrease	(57.7)
Property sales	8.0
Other	12.0
Year to 31 March 2022	1,862.7

Revenue was up £55 million, at £1,863 million, largely reflecting higher consumption as business activity returns to pre-pandemic levels.

In 2021/22 we have had a £14 million reduction in the revenue cap, incorporating a 1.5 per cent real reduction in allowed wholesale revenues partly offset by a 0.6 per cent CPIH-linked increase.

With many more businesses able to operate compared with last year, when the impact of the initial lockdown was significant, non-household revenue has increased by £106 million. In contrast, consumption from households, although higher than pre-pandemic norms, has decreased £58 million this year. This is due to significantly higher consumption particularly during the first half of last year reflecting the initial impact of people being locked down at home through the warm weather of late spring 2020.

Operating profit

	£m
Underlying and Reported – year to 31 March 2021	602.1
Revenue increase	54.7
COVID-related costs in prior year	8.0*
Costs driving ODI performance	(17.0)
Power cost increase	(16.0)
Other costs, largely due to inflation	(16.0)
SaaS costs treated as operating expenses	(5.8)
Underlying and Reported – year to 31 March 2022	610.0

^{* £8}m COVID-related costs was an estimate in the year ended 31 March 2021 because, with the passage of time and as conditions brought about by the pandemic have become embedded into normal business processes, the usefulness of tracking COVID-related costs specifically has diminished.

Underlying and reported operating profit at £610 million was £8 million higher than last year. The £55 million increase in revenue was mostly offset by higher power costs and inflationary pressures increasing our underlying cost base, predominantly in respect of materials and labour.

We have a reduction of around £8 million in operating costs as last year saw additional one-off costs incurred in adapting to operate through the pandemic.

The £17 million of additional costs driving ODI performance are targeted at improving performance against specific customer ODIs, such as spend associated with Dynamic Network Management.

Power costs have increased by £16 million this year, largely in relation to higher prices. Power is a significant cost for our business, which is why we manage this risk through a progressive policy of hedging the commodity price element of power costs to minimise short term volatility (commodity price makes up around half of our annual power costs, with the other half relating to the use-of-system charge and other levies). Through this hedging policy and self-generation, we locked in the cost on the majority of our consumption for 2021/22 before the most recent energy price rises, securing an average rate of £65 per megawatt hour (MWh) for the year, which is significantly lower than the current market rate of over £200 per MWh for next year and has been fundamental to our ability to minimise the impact on our cost base. We are also locked-in on over 90 per cent of expected consumption for 2022/23, and around two-thirds of expected consumption across the final two years of AMP7, at rates that compare favourably to the current market rate.

Cost increases of £16 million largely stem from higher inflation in the period. We are not immune to the impact of the current high inflation environment, but through hedging, constructive cost challenge and commercial negotiations, we have managed to mitigate much of the cost increase to date.

During the year, the IFRS Interpretations Committee (IFRIC) published clarifications on how arrangements in respect of a specific part of cloud technology – Software as a Service – should be accounted for, resulting in £6 million of costs that would previously have been accounted for as fixed asset additions now being treated as operating costs.

Household bad debt is back at our lowest ever level of 1.8 per cent of regulated revenue, having reduced from 2.2 per cent in the year to 31 March 2021 as we return to pre-pandemic levels.

Profit before tax

	£m
Underlying – year to 31 March 2021	484.2
Underlying operating profit increase	7.9
Underlying net finance expense increase	(176.9)
Share of JVs losses decrease	7.5
Other	0.1
Underlying – year to 31 March 2022	322.8
Adjusted items *	138.0
Reported – year to 31 March 2022	460.8

^{*} Adjusted items are set out on page 35

Underlying profit before tax was £323 million, £161 million lower than last year. This reflects the £8 million increase in underlying operating profit and a decrease in the share of losses of joint ventures of £8 million, more than offset by a £174 million increase in underlying net finance expense. Underlying profit before tax reflects consistently applied presentational adjustments as outlined on page 34.

Reported profit before tax decreased by £114 million to £461 million reflecting the £8 million increase in reported operating profit and an £8 million decrease in the share of losses of joint ventures, more than offset by a £90 million increase in reported net finance expense (including fair value movements), and the inclusion last year of a £37 million profit on disposal of our share in the joint venture AS Tallinna Vesi.

Net finance expense

The underlying net finance expense of £286 million was £177 million higher than last year, mainly due to the non-cash impact of significantly higher inflation on our index-linked debt.

The indexation of principal on index-linked debt, excluding the impact of inflation swaps, amounted to a net charge in the income statement of £228 million, compared with a net charge of £53 million last year, resulting in an increase of £175 million. Interest on non index-linked debt of £110 million is consistent with last year, while various smaller year-on-year increases and decreases broadly offset against one another when considered together.

The £286 million underlying net finance expense included in the income statement for the year compares with £99 million net cash interest paid included in the statement of cash flows. This £187 million difference is predominantly due to non-cash inflation uplifts on index linked debt and derivatives of £256 million, less capitalised borrowing costs of £53 million and net pension interest income of £14 million, both of which are non-cash items.

Reported net finance expense of £148 million was £90 million higher than last year, reflecting the £177 million increase in underlying net finance expense, partially offset by an £84 million increase in net fair value gains on our debt and derivative portfolio, excluding interest on derivatives and debt under fair value option, from £54 million last year to £138 million this year.

Joint ventures

For the year to 31 March 2022, we recognised a £2 million loss in the income statement relating to our joint venture Water Plus, compared with a £9 million net share of losses from joint ventures last year, which included a share of profits from the AS Tallinna Vesi joint venture prior

to its disposal. A profit £37 million was recognised on the disposal of our share in AS Tallinna Vesi, which was completed on 31 March 2021. In the year to 31 March 2021, we also recognised a £37 million profit on disposal of our share in AS Tallinna Vesi, which was completed on 31 March 2021.

Profit/(loss) after tax

	PAT
	£m
Underlying – year to 31 March 2021	402.5
Underlying profit before tax decrease	(161.4)
Tax credit relating to research and development tax allowances	72.5
Underlying tax decrease, including the impact of capital allowance 'super deductions'	70.3
Underlying – year to 31 March 2022	383.9
Adjusted items *	(423.8)
Reported – year to 31 March 2022	(39.9)

^{*} Adjusted items are set out on page 35.

Underlying profit after tax of £384 million was £19 million lower than last year, as the £161 million reduction in underlying profit before tax is partly offset by £142 million lower underlying tax (moving from a charge of £77 million last year to a net credit of £65 million this year). The reduction in underlying tax reflects a £73 million tax credit relating to optimising the available research and development UK tax allowances on innovation-related expenditure we had incurred in prior years, and the impact of the capital allowance 'super deductions' announced in the March 2021 Chancellors Budget, which lowers the current tax charge significantly in the current period.

The group has a reported loss after tax of £40 million this year, compared with a £473 million reported profit after tax last year. This £433 million difference reflects the £114 million decrease in reported profit before tax, and a £544 million increase in deferred tax largely due to a one-off charge to restate the brought forward deferred tax liability at the new 25 per cent future headline rate, partially offset by a £146 million positive movement in current tax primarily as a result of adjustments in respect of optimising available tax incentives on our innovation-related expenditure in prior years.

<u>Tax</u>

The group continues to be fully committed to paying its fair share of tax and acting in an open and transparent manner in relation to its tax affairs and we were delighted to have retained the Fair Tax Mark independent certification for a third year, having been only the second FTSE 100 company to be awarded the Fair Tax Mark in July 2019.

In addition to corporation tax, the group pays significant other contributions to the public finances on its own behalf as well as collecting and paying over further amounts for its over 5,000 strong workforce. The total payments for 2021/22 were around £230 million and included business rates, employment taxes, environmental taxes and other regulatory service fees such as water abstraction charges as well as corporation tax.

In 2021/22, we paid corporation tax of around £9 million, which represents an effective cash tax rate on underlying profits of 3 per cent, which is 16 per cent lower than the headline rate of corporation tax of 19

per cent. The key reconciling item to the headline rate of corporation tax continues to be allowable tax deductions on capital investment including the new temporary capital allowance 'super deductions', where the current year tax benefit was around £40m representing a 13 per cent reduction to the effective cash tax rate. We expect a similar tax benefit from the temporary super deduction regime for 2023 as well.

We have expressed the effective cash tax rate in terms of underlying profits as this measure excludes fair value movements on debt and derivative instruments and thereby enables a medium-term cash tax rate forecast. We expect the average cash tax rate on underlying profits to remain below the headline rate of tax for the medium term.

For 2021/22, the group recognised an overall current tax credit of £62 million in 2021/22. This includes a current tax charge relating to 2021/22 of £11 million this year, compared with £85 million in the previous year, key reconciling items being the lower taxable profits and the availability of capital allowance 'super deductions' for 2021/22. In addition, in the current year, there were prior period tax credits of £73 million, compared with £1 million in 2020/21. The current year credit mainly relates to optimising the available research and development UK tax allowances on our innovation-related expenditure for multiple prior years.

For 2021/22, the group recognised a deferred tax charge of £563 million, compared with £18 million for 2020/21. For 2021/22, £403 million relates to the government's planned increase in the rate of corporation tax from 19 per cent to 25 per cent from 1 April 2023. Subject to any legislative or tax practice changes, we would expect the total effective tax rate to continue to be broadly in line with the headline rate of corporation tax for the medium term.

In 2021/22, there are £136 million of tax adjustments recorded within other comprehensive income, primarily relating to remeasurement movements on the group's defined benefit pension schemes. As in the prior year the rate at which the deferred tax liabilities are measured on the group's defined benefit pension scheme is 35 per cent, being the rate applicable to refunds from a trust.

Cash flow

Net cash generated from continuing operating activities for year to 31 March 2022 was £1,037 million, £187 million higher than £850 million last year. The group's net capital expenditure was £627 million, principally in the regulated water and wastewater investment programmes. This excludes infrastructure renewals expenditure, which is treated as an operating cost.

Pensions

As at 31 March 2022, the group had an IAS 19 net pension surplus of £1,017 million, compared with a surplus of £689 million at 31 March 2021. This £328 million increase principally reflects an increase in credit spreads during the year, partially offset by a higher inflation assumption. The group has de-risked its pension schemes through hedging strategies applied to the underlying interest rate and future inflation. The IAS 19 position remains volatile to changes in credit spread and changes in mortality, neither of which have been hedged at this current time. This is primarily due to difficulties hedging against credit spread volatility over long durations, and, for mortality, there is lower volatility in the short term and relatively high hedging costs. The scheme specific funding basis does not suffer volatility due to credit spread movements to the same extent as it uses a prudent, fixed credit spread assumption.

Further detail on pensions is provided in note 18 ('Retirement benefit surplus') of these financial statements.

Financing

Net debt	£m
At 31 March 2021	7,390.9
Cash generated from operations	(1,036.6)
Net capital expenditure	626.7
Dividends	295.5
Indexation	228.6
Interest	98.7
Fair value movements	28.7
Extension of loans to joint ventures	13.0
Tax	8.9
Other	(0.2)
At 31 March 2022	7,654.2

Net debt at 31 March 2022 was £7,654 million, compared with £7,391 million at 31 March 2021. This comprises gross borrowings with a carrying value of £7,969 million net of cash and short-term deposits of £220 million and net derivative assets hedging specific debt instruments of £169 million.

Underlying movements in net debt are largely a result of net operating cash inflows offset by our net capital expenditure, dividends, indexation and cash interest.

Gearing, measured as group net debt divided by UUW's shadow (adjusted for actual spend and timing difference) regulatory capital value of £12.4 billion, was 61 per cent at 31 March 2022. This is slightly lower than gearing of 62 per cent as at 31 March 2021, and remains comfortably within our target range of 55 to 65 per cent.

OUTLOOK

We have delivered another good year of performance, maintaining high levels of customer satisfaction underpinned by our Systems Thinking approach, improving operational performance, and long-term financial resilience, giving us confidence in our ability to continue to create value for customers, the environment, and other stakeholders.

We are accelerating our AMP7 capital programme and investing an additional £765 million over the regulatory period to help us deliver even more sustainable improvements in customer and environmental performance, and to get ahead of the requirements coming into force through the Environment Act. This investment, together with latest views of inflation, contributes to RCV growth over AMP7 of 21 per cent on a nominal basis, more than 10 per cent higher than we expected at the beginning of the period.

Our sustained high level of operational performance is earning outperformance, and we have increased our target of cumulative net outperformance against customer ODIs by a third to around £200 million in total over AMP7. As a consequence of our performance in AMP7 and the additional investment we are making, we are generating around £750 million of value that we expect to receive through an RCV uplift and additional revenues in AMP8.

Guide to Alternative Performance Measures (APMs)

The underlying profit measures in the following table represent alternative performance measures (APMs) as defined by the European Securities and Markets Authority (ESMA). These measures are linked to the group's financial performance as reported in accordance with UK-adopted international accounting standards and the requirements of the Companies Act 2006 in the group's consolidated income statement, which can be found on page 103. As such, they represent non-GAAP measures.

These APMs have been presented in order to provide a more representative view of business performance. The group determines adjusted items in the calculation of its underlying measures against a framework which considers significance by reference to profit before tax, in addition to other qualitative factors such as whether the item is deemed to be within the normal course of business, its assessed frequency of reoccurrence and its volatility which is either outside the control of management and/or not representative of current year performance.

In addition, a reconciliation of the group's average effective interest rate has been presented, together with a prior period comparison. In arriving at net finance expense used in calculating the group's effective interest rate, underlying net finance expense is adjusted to add back net pension interest income and capitalised borrowing costs in order to provide a view of the group's cost of debt that is better aligned to the return on capital it earns through revenue.

Adjusted item	Rationale		
Adjustments not expected to	Adjustments not expected to recur		
Profit on disposal of joint ventures	This relates to the disposal of the group's 35.3% stake in its Estonian joint venture, AS Tallinna Vesi, which represents a significant, atypical event and as such is not considered to be part of the normal course of business.		
Consistently applied present	ational adjustments		
Fair value (gains)/losses on debt and derivative instruments, excluding interest on derivatives and debt under fair value option	Fair value movements on debt and derivative instruments can be both very significant and volatile from one period to the next, and are therefore excluded in arriving at underlying net finance expense as they are determined by macroeconomic factors which are outside of the control of management and relate to instruments that are purely held for funding and hedging purposes (not for trading purposes). Included within fair value movement on debt and derivatives is interest on derivatives and debt under fair value option. In making this adjustment it is appropriate to add back interest on derivatives and debt under fair value option to provide a view of the group's cost of debt which is better aligned to the return on capital it earns through revenue. Taking these factors into account, management believes it is useful to adjust for these fair value movements to provide a more representative view of performance.		
Deferred tax adjustment	Management adjusts to exclude the impact of deferred tax in order to provide a more representative view of the group's profit after tax and tax charge for the year given that the regulatory model allows for cash tax to be recovered through revenues, with future revenues allowing for cash tax including the unwinding of any deferred tax balance as it becomes current. By making this adjustment, the group's underlying tax charge does not include tax that will be recovered through revenues in future periods, thus reducing the impact of timing differences.		
Tax in respect of adjustments to underlying profit before tax	Management adjusts for the tax impacts of the above adjusted items to provide a more representative view of current year performance.		

Underlying profit

	Year ended	Year ended
	31 March 2022	31 March 2021
Operating profit	£m	£m
Operating profit per published results	610.0	602.1
Underlying operating profit	610.0	602.1
Net finance expense		
Finance expense	(187.7)	(103.5)
Investment income	40.3	49.2
Net finance expense per published results	(147.4)	(54.3)
Net fair value gains on debt and derivative instruments, excluding interest on swaps and debt under fair value option	(138.0)	(54.3)
Underlying net finance expense	(285.4)	(108.6)
Share of losses of joint ventures per published results	(1.8)	(9.3)
Profit on disposal of joint ventures per published results	_	36.7
Profit on disposal of AS Tallinna Vesi joint venture	_	(36.7)
Underlying profit on disposal of joint ventures	_	_
Profit before tax per published results	460.8	575.2
Adjustments in respect of operating profit	_	_
Adjustments in respect of net finance expense	(138.0)	(54.3)
Adjustments in respect of profit on disposal of joint ventures	_	(36.7)
Underlying profit before tax	322.8	484.2
(Loss)/Profit after tax per published results	(39.9)	472.9
Adjustments in respect of profit before tax	(138.0)	(91.0)
Deferred tax adjustment	562.5	18.4
Tax in respect of adjustments to underlying profit before tax	(0.7)	2.2
Underlying profit after tax	383.9	402.5

Average effective interest rate

In arriving at net finance expense used in calculating the group's effective interest rate, management adjusts underlying net finance expense to add back pension income and capitalised borrowing costs in order to provide a view of the group's cost of debt that is better aligned to the return on capital it earns through revenue.

	31 March 2022 3	31 March 2022 31 March 2021	
Underlying net finance expense	(285.4)	(108.6)	
Net pension interest income	(14.3)	(17.5)	
Adjustment for capitalised borrowing costs	(52.7)	(30.4)	
Net finance expense for effective interest rate (a)	(352.4)	(156.5)	
Average notional net debt (b)	(7,377)	(7,400)	
Average effective interest rate (a/b)	4.8%	2.1%	

Our approach to climate change

Task Force on Climate-related Financial Disclosures (TCFD)

Climate change and extreme weather events are critical to our service delivery because of our reliance on a stable climate and the natural environment. Here we report on our latest progress and plans on cutting emissions to reduce future climate change, known as climate mitigation, and how we are maintaining and improving our resilience to climate change, known as climate adaptation.

Our business, and the communities we serve, has already experienced the impacts of climate change, including several record-breaking weather events that caused impacts such as flooding, power cuts and travel disruption. Risks associated with flooding are heightened in the North West because it is the wettest region in the country, and this is projected to increase with climate change. There is overwhelming evidence that we need to prepare for more severe weather events more often, as well as gradual trends for wetter winters, hotter drier summers and rising sea levels. We integrate past and projected climate data throughout our plans to ensure an effective and evolving response. We are committed to playing our part in securing the global goal to curb climate change to no more than 1.5oC.

In the following pages we share our greenhouse gas emissions (GHGs) and progress towards meeting our six carbon pledges and science-based targets (SBTs). We present our six most sensitive climate risks and our new adaptation report. In this section, supported with content elsewhere in this integrated report and on our website, we include disclosures consistent with the TCFD Recommended Disclosures all sector guidance.

Where to find our TCFD recommended disclosures

N.B. Where followed by "UUG" page references relate to the Group Annual Report and Financial statements.

Governance	Pages	Topic
Board's oversight of climate-related risks and opportunities.	43–44	TCFD governance
Management's role in assessing and managing climate-related risks and opportunities.	120 UUG	Governance structure
Strategy	Pages	Topic
Climate-related risks and opportunities identified over the short, 2		Creating value
medium, and long term.	11-12	Our approach to materiality
Impact of climate-related risks and opportunities on our businesses,	18–21	Business planning horizons
Resilience of our strategies, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	42-43	Pledges and targets
	46–49	Climate sensitive risks
	49-53	TCFD strategy
	54-55	TCFD metrics and targets
	63-85	Our risk management
Risk management	Pages	Topic
Processes for identifying and assessing climate-related risks.	45–49	TCFD risk management
Processes for managing climate-related risks.	63-85	Our risk management
How processes identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management		

Metrics and targets	Pages	Topic
Metrics used to assess climate-related risks and opportunities in line	e 52–83 UUG	Our performance
with our strategy and risk management processes.	42-43	Pledge progress
Scope 1, Scope 2, and Scope 3 GHG emissions, and related risks.	54-55	TCFD metrics and targets
Targets used to manage climate related risks and opportunities and performance against targets.	54-55	Energy and carbon report
performance against targets.	161–191 UUG	Remuneration

Pledge 1 - Reduce scope 1 & 2 emissions

Down 2.2% compared to baseline

We are making good progress towards our science-based target to reduce scope 1 and 2 emissions by 42 per cent from our baseline by 2030.

2021/22: 135,936 tCO₂e

2019/20: 138,961 tCO₂e (baseline year)

Pledge 2 - 100% of electricity used from renewable sources

We achieved this pledge from October 2021

From October 2021 the electricity we purchased was from guaranteed renewable sources. In addition, we generated a record 210 GWh of renewable energy in 2021/22, equivalent to 26 per cent of our total electricity consumption.

Pledge 3 - 100% green fleet by 2028

27 fully electric vehicles (EV) now deployed in our fleet with plans for 200 low carbon vehicles by 31 March 2025

We have installed advanced telematics to improve understanding of travel patterns and are trialling options for larger vehicles. We are enabling employees to shift to EV through changes to the company car policies and launch of a salary sacrifice scheme 'EVolve'.

Pledge 4 - 1,000 hectares of peatland restoration by 2030

Restoration activity well underway

We have restoration projects across the North West at different stages of maturity. As well as continuing our site work to completion, we aim to become an early pioneer in applying the Peatland Code at scale to independently verify the carbon benefits.

Pledge 5 - Create 550 hectares of woodland by 2030

9 hectares planted and validated to the Woodland Carbon Code

Planting in 2021 was postponed due to weather and tree disease. The remaining 541 hectares have been planned and the funding identified.

Pledge 6 - Set scope 3 science-based target

Targets verified by SBTi

Emissions from our value chain are the most challenging to address so we are working with our supply chain. We are exploring how to improve our calculation methods for scope 3 emissions so that we can consider and openly report the impact of our management choices.

Transparency and disclosures

We have a long track record of public carbon and climate change disclosures having estimated and reported our carbon footprint since 2006 and participated in CDP's Climate Change Programme for 12 years. Our reporting is fully compliant with UK Government Environmental reporting guidelines and applies international best practice such as Greenhouse Gas Protocol Corporate Accounting and Reporting Standards (2015). The Science Based Targets initiative (SBTi) assessed and verified our four science-based targets in July 2021 and commended our ambitious 1.50C aligned scope 1 and 2 target.

We confirm that our annual report includes all climate-related financial disclosures required to be consistent with the TCFD recommendations and recommended disclosures and is in line with the current Listing Rules requirements (as referred to in Listing Rule 9.8.6R(8)). Corporate Citizenship, a leading sustainability consultancy, has reviewed this disclosure and provided an ISAE assurance against the Principles of Effective Disclosure to ensure that consistency with TCFD recommendations including the implementation guidance published in the 2021 Annex.

2021 performance

CDP is known for setting the standard for companies on their environmental leadership. In 2021 we achieved an overall B rating, with category scores of A in targets, governance and risk management. We are working to improve the other categories towards achieving an overall A list rating. We were proud to be recognized as a 2021 Supplier Engagement Leader, raising the level of climate action across our value chain.

Examples of our activities to respond to climate change

Haweswater Aqueduct Resilience Programme (HARP)

The Haweswater Aqueduct plays an important role in moving large volumes of water from the Lake District to supply Greater Manchester. The aqueduct was originally completed in 1950 and since 2005 we have been planning how to secure its continued and long-term resilience.

Following extensive planning and stakeholder engagement we are ready to start delivery of a solution designed to meet future demand whilst maintaining a gravity-fed, low carbon water supply. The proposed tunnelling solution has been assessed as having one of the lowest environmental and carbon impacts of all options considered, with further opportunities identified to recycle materials to local sites thus reducing impacts from vehicle movements.

Surface water separation – Blackpool south

We have invested over £30 million to address the combined challenges of climate change, an ageing Victorian sewer network, and increasing urbanisation in Blackpool.

The primary objective of this project was to separate surface water from the combined sewer system. New infrastructure was constructed, including a storm water interception tank, pumping stations, and a new sea outfall to provide a sustainable discharge point for surface waters. This will prevent over 800,000m3 of surface water from entering the combined sewer system during wet weather. By diverting the surface water away, the flooding risks posed by storms due to the resulting excess volume of wastewater have been significantly reduced.

Governance

TCFD definition

The organisation's governance around climate-related risks and opportunities.

Progress this year

- Oversight and scrutiny of climate change matters by the board and its committees, including approval of our new science-based targets, and review of the adaptation progress report and carbon commitments risk.
- Strengthened governance by expanding our director-led climate change mitigation steering group and introduced six new cross-business working groups.
- Introduced carbon measures into the executive remuneration framework.
- Expanded our internal carbon and climate change teams.
- Supplemented public disclosures through conversations with investors and participation in new climate-related indices and assessments.

Future focus

- Communication and engagement programme with all stakeholder groups.
- Deploy whole-life carbon costing using an internal carbon price aligned to government carbon values.

Board oversight of climate-related risk and opportunities

2021 saw increased global attention on the climate change emergency culminating at the COP26 climate summit in Glasgow. As board members, our Chief Executive Officer and Chief Financial Officer both show personal leadership for the impact of climate change on our capacity and capability to deliver our services. Climate change-related matters have always been of interest to the corporate responsibility committee in its role to scrutinise environmental topics and initiatives. This year, climate change matters have also been discussed by the audit committee (review of carbon commitments risk) and remuneration committee (linking long-term incentive outcomes to the delivery of carbon pledges).

Management role

CEO Steve Mogford has ultimate responsibility for the group's preparedness for adapting to climate change and driving our mitigation strategy. CFO Phil Aspin has executive responsibility for risk management and is supported in this role by the head of audit and risk and the corporate risk manager. Along with the executive team, they are tasked with managing the risks and mitigating actions, for example by ensuring the company has the necessary financial resources and skilled people are in place to achieve its climate-related objectives.

Our climate change mitigation strategy starts with 'vision and visibility', reflecting that consideration of climate is becoming an essential factor in both day-to-day and strategic decision-making and behaviours. All of the principal management committees have discussed climate-related matters this year. For example, our leadership team has tracked the delivery of our carbon pledges as part of the quarterly business reviews and initiated a trial of a low emission fuel HVO as a result. The capital investment committee is working to integrate climate issues into its decision-making processes including a carbon reduction incentive for capital programme delivery partners.

In 2021/22, we held two deep-dive workshops to build executive team knowledge and awareness of carbon. This resulted in a refresh of our climate change mitigation governance and the creation of new director-led working groups. These focus on maturing our decision-making and delivering reductions of all greenhouse gas (GHG) emissions while developing our future climate-related strategy and engagement.

Introducing carbon to our executive remuneration

Four carbon measures have been agreed by the remuneration committee for the three-year period ending 31 March 2025, together forming ten per cent of the Long Term Plan (LTP) against which stretching targets have been set. These measures are:

- green fleet vehicles;
- woodland creation;
- peatland restoration; and
- supply chain engagement.

Including targets within our executive remuneration arrangements recognises the importance of our carbon commitments. We have designed these measures to reinforce delivery of our ambitious carbon pledges and science-based targets. We are working to mature these incentive measures in future years, ultimately to align with our science-based emission reduction targets for 2030 and beyond.

Risk management

TCFD definition

How the organisation identifies, assesses and manages climate-related risks.

Progress this year

- Published our third adaptation report, including the outcome of a progress review of climaterelated risks across the organisation.
- Greater recognition of transitional risks in our corporate risk management system, in particular the
 investment needed to meet our carbon commitments and the potential costs to the business if we
 do not.

Future focus

- Produce our PR24 business plan with full integration of carbon reduction and climate resilience priorities.
- Finalise and publish our 2022 Drought Plan.
- Improve our long-term strategic plans for water resources and drainage, integrating advanced climate change analysis to shape our investment and operational approaches in the short, medium and long term (up to 80 years).
- Embed climate change impacts into corporate decision-making tools and processes.

Climate risk identification and assessment

We have a mature risk and resilience framework for the identification, assessment and mitigation of risks, as described on pages 63 to 85. This framework is used to identify and assess climate-related risks. We consider both physical risks, identified as those related to climate change impacts on our operations or assets, and transitional risks, which are those associated with the necessary transition to a low-carbon economy (e.g. changes to policies, regulation and legislation).

We use a variety of approaches to assess risks, such as risk breakdown structures and PESTLE. We use complex modelling of the physical impacts of climate change in our water resources and drainage management planning, and incorporate Met Office UK climate projections. In our assessment of

materiality we recognise that some risk events may happen multiple times so we compare impacts over a long-term (40-year) horizon. This accentuates where climate change, and other demographic changes, influence the frequency of events as well as the consequences.

We have found that horizon scanning for industry research and emerging legal and regulatory changes are particularly useful when considering transitional risks. In our revision of the carbon commitments risk, we incorporated the updated carbon values provided by the department for Business, Energy and Industrial strategy (BEIS). Applying these values resulted in an escalation of the risk to the executive team and board who re-evaluated our response to ensure we continue to effectively manage the risk. Incorporating longer-term climate change impacts explicitly in our corporate risk framework has raised the profile of climate change, allowing the board to consider our appetite and capacity to mitigate and control the risks from within existing risk management processes and with the same thresholds for materiality.

Managing climate-related risks

By recognising the causes and consequences, and assessing the likelihood and the severity of impact (both financial and reputational) should the event occur, we are able to prioritise climate-related risks and take proactive and early action to reduce the frequency and severity.

As climate change is a common causal factor for our principal risks (see pages 68 to 78), a review of all event-based risks in our business risk profile was undertaken to assess their sensitivity to climate change. The most sensitive risks are outlined on page 46 to 49 and more details, including discussion and examples of activities to mitigate and control for these risks, can be found in our latest adaptation progress report.

Organisational resilience to climate change

In preparing each of our three adaptation progress reports, we assessed the organisation's resilience to specific outcomes of climate change, such as hotter, drier summers and more extreme weather events. We identified over 90 risks that could impact a single business area, for instance wastewater, but we also noted business-wide risks, interdependencies and transitional risks. The outcome of the latest assessment was 79 new or existing mitigating actions listed in our adaptation report along with an update on what has been done to manage the risk to date.

We are maturing our understanding of risk and uncertainty to build and maintain long-term resilience across the corporate, financial and operational structures of the group. Looking ahead, we will explore how innovation can help us to learn more about the profile of risk events, their causes and consequences, and to identify opportunities to improve our capacity and capability. This will help us to identify where climate risks remain uncertain or where existing controls might be inadequate to manage the risk in the long term. This will help us to be better prepared by prioritising issues.

Our risks most sensitive to climate change

Last year, we presented the outcome of a special risk assessment on the sensitivity of all our event-based risks to climate change. We have updated this assessment through our corporate risk process and the results are shown below. Likelihood and impact are based on the Met Office climate projections using the most likely global emissions scenario known as RCP 6.0, in which emissions peak around 2080 and average temperatures will have risen to between 3 and 3.5oC by 2100.

Risk categorisation



Chronic physical risk – changing trends in weather patterns, such as rising temperatures, sea level and rainfall.



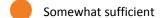
Acute physical risk – chance of severe weather events, such as storms, heat waves and floods.

* One of the most significant event-based group risks

Control effectiveness

Controls are the activities we undertake to reduce risk or realise an opportunity.





Mostly sufficient

Water sufficiency event

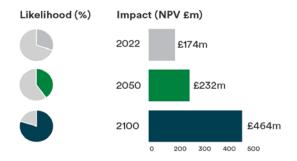


Prolonged dry periods can cause supply challenges. Warmer temperatures intensify these pressures because of increased water usage and evapo-transpiration.

Controls



- Reduce leakage.
- Support customers to use less water.
- Install more meters in domestic properties.
- Develop new sources of water, particularly boreholes.
- Long-term water resources management planning.
- Facilitate water trading between the North West and other regions of the UK.



Failure of wastewater network (sewer flooding)



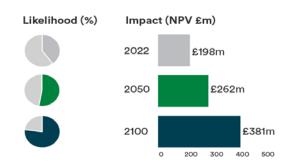


More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding. Urbanisation makes this worse due to quick run-off from hard surfaces.

Controls



- Implement and encourage 'slow the flow' and sustainable drainage solutions.
- Support customers to use sewers responsibly.
- Increase sewer capacity and build storm water holding tanks.
- Use technology to monitor and better control flows in the sewer system.
- Install flood protection devices to at-risk properties.



Land management *





Deterioration in land quality due to climate change has both direct and indirect impacts. Hotter, drier summers lead to fire, flood, subsidence and landslip events which in turn have associated health, safety and environmental impacts.

Controls



- Catchment Systems Thinking and proactive land management, including nature-based solutions.
- Deliver net gain in biodiversity from our construction projects.
- Directly restore peatland and woodland.
- Work in partnership with farmers, regulators and others to improve upland watercourses.



Failure to adequately treat



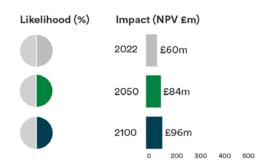
wastewater

Extremely heavy rainfall, which is projected to happen more often, can exceed our wastewater treatment works capacity and result in use of overflows to prevent flooding of assets, streets and homes.

Controls



- Investment to meet legislated environment and treatment capacity requirements.
- Inclusion of climate change growth parameters in long-term adaptive plans.
- Controls for failure of wastewater network will support this risk.



Failure of above-ground water and wastewater assets



(flooding)

Average winter rainfall is projected to rise, increasing the frequency of extreme events where operational sites are flooded from sea, river or surface water sources.

Controls



- Install permanent flood defences at most flood-prone sites.
- Improve flood forecasting capabilities.
- Build better network connectivity to maintain water supplies during floods.
- Invest in quick recovery once flooding subsides.



Recycling biosolids to agriculture *



Water logging resulting from more persistent rainfall will limit options for recycling biosolids to land for a greater part of the year. Uncovered sludge stores and stockpiles will be more vulnerable in persistent wet, winter weather, increasing the risk of environmental pollution from run-off.

We are currently updating our assessment of this risk following recently proposed legislative changes included within the Farming Rules for Water. We expect this will significantly restrict the window of permitted recycling of biosolids to agriculture, and therefore exceed the climate change impact we have previously assessed.

Strategy

TCFD definition

How climate-related risks and opportunities impact the organisation's businesses, strategy and financial planning.

Progress this year

- Built relationships with key suppliers to reduce environmental impact by sharing best practice and collaborating on how to reduce GHGs.
- Further developed our multi-capital approach to enhance decision-making processes, integrating both GHG impact and attributes of climate resilience.
- Implemented climate change resilience plans (both physical and transitional) across AMP7, incorporating natural capital solutions.

Future focus

Further develop our mitigation and adaptation strategies and delivery plans.

- Include low carbon and climate adjustable approaches in our PR24 business plan.
- Assess and limit the carbon impact of our PR24 business plan.



Our climate change mitigation strategy

Planning horizons

Our assets typically have long, even very long, lifespans so we are vulnerable to physical climate risks over the long term, and we are already experiencing the impacts of climate change in the North West. We undertake planning for long (25+ years), medium (5–10 years), and short-term (one year) horizons, enabling us to account for external drivers including climate change, while continuing to fulfil our purpose in a resilient and adaptable way. Our planning horizons are further described on pages 48 to 49 of the UUG 2022 Annual Report and financial statements.

Short-term climate issues

Extreme weather events such as periods of hot and dry weather, cold snaps and heavy rain events impact our ability to deliver our services. Climate change is already increasing the frequency of these events (see page 53), exacerbating the impact of existing risks such as sewer flooding, asset flooding and asset deterioration as can be seen in the current top ten event-based risks shown on pages 79 to 81.

The North West has felt the significant damage caused by numerous extreme storms over recent years. The region has 28 per cent more rainfall than the average for England and Wales and climate change will

further increase the likelihood and severity of intense storms. There is also a significantly higher proportion of combined sewers so, together, this means more pressure on sewerage and treatment infrastructure, and relatively more risk from sewer flooding and/or pollution from storm overflows. Managing the risk of flooding is a priority for us and other agencies in the North West.

Medium and long-term impact of climate change

Predicting the effects of climate change is complex, with greater uncertainty about how our infrastructure will respond to the challenges presented by both climate and demographic changes. We considered the implications of climate change to our business risk profile to ascertain which risks were sensitive to climate change in that climate change would increase their likelihood or severity. To quantify the risk we used the highly respected and relevant Met Office UK Climate Projections 2018 (UKCP18) for weather in the North West. There are four main pathways used for climate modelling and research, each describing climate futures related to the volume of greenhouse gases emitted. For our climate sensitivity assessment we chose the Met Office climate projections for the representative concentration pathway, RCP 6.0, which has an emissions peak occurring in 2080 and an expected 3.0–3.5oC increase in global mean temperatures from pre-industrial levels.

Impact of climate-related risks and opportunities on our business strategy and planning

We have taken a twin track approach to addressing climate change in our business strategy and planning (see page 53). We account for the costs and benefits, of both mitigation and adaptation and in this way manage both physical and transitional climate risks as we deliver our services in a sustainable and resilient way.

Adapting to physical risks

All six of the risks most sensitive to climate change are physical risks, meaning they are disruptive or destructive to our operations or assets. This means there are tangible controls that can be put in place to improve our resistance to weather events, enhance our response and recovery preparations and realise opportunities.

We are applying a systems thinking approach which recognises the complex interdependencies within our business functions and externally across society. This means that interventions to address one risk have multiple benefits. For instance, sustainable drainage systems (SuDS) to slow down or divert rainwater run-off both reduce the risk of sewer flooding and optimise wastewater treatment capacity. Green infrastructure solutions such as SuDS provide an opportunity to deliver wider social value in the community and local environment.

Strategies for a changing climate

Alongside our focus to address the climate-related risks to our service delivery, we recognise the critical need to secure a stable climate and minimise the need for adaptation over the long term. We are part of the global leadership community that is working to encourage everyone to contribute to achieving the global goal to curb emissions.

In response, our climate change mitigation strategy has four pillars (see page 50). Our focus this year has been to consolidate our ambition and commitments and to enhance the visibility and understanding of climate impacts both within the organisation and to our external stakeholders. We were proud to be the first UK water company to have its targets verified by the Science Based Targets initiative (SBTi) and used this to drive communication and engagement. We held deep-dive sessions with the executive team, developed and launched an employee e-learning module, and had net zero as a theme in our latest Innovation Lab, in which we challenge and collaborate with new suppliers.

Climate change was a topic in our CEO graduate challenge. A team of graduates focused on helping mature plans towards a net zero future by developing a tool to estimate process emissions on a site-by-

site basis, promoting our carbon pledges to employees through a social media campaign, and compiling a database of over 200 potential emission reduction opportunities that we are now exploring as part of our mitigation delivery plans.

Resilience of our strategies

Weather is fundamental to how our water, wastewater and bioresources operations function so it is critical we make our assets, systems and strategies climate-ready. More frequent extreme weather events increase the risk of cascade impacts. Multiple different extreme weather events can occur in a single short time frame, such as storms Dudley, Eunice and Franklin in February 2022. Our ability to recognise the compound physical impacts to our system, and have various recovery tactics, is increasingly vital in effective climate change adaptation.

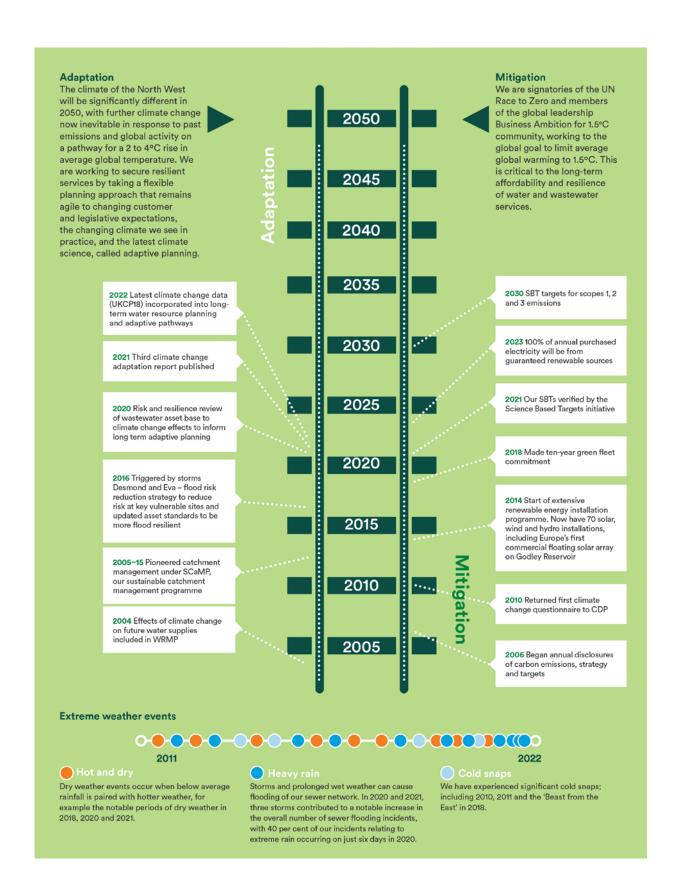
Our public Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) are examples of where adaptive planning, incorporating climate change scenarios and advanced modelling, are used to shape our plans for the long term (25+ years) whilst staying aligned with our short-term needs. In these plans we describe how we have used complex models to test how resilient our services would be against a range of possible future climate change and demand scenarios (population growth and movement, economic trends and patterns of water use). Understanding these impacts allows us to adapt our plans to improve performance and resilience across key topic areas such as water supply, leakage, sewer flooding and pollution. For example, we have decided to invest to ensure certain drought options are always available, minimising the time it takes to bring them online during dry weather conditions. This will enable us to react more quickly and make supplies more resilient during dry weather. Together with reducing demand through leakage and water efficiency, this has reduced the likelihood of requiring drought permits and temporary use bans.

As well as targeted scenario analysis in WRMP and DWMP, we have developed three company-wide alternative scenarios for 2050, incorporating combinations of key factors that are both highly relevant and uncertain. These scenarios, named 'climate chaos', 'green guardianship' and 'public purpose', have associated metrics to define possible futures for water and wastewater services in the North West. The scenarios recognise climate change as one of the most critical factors shaping future services and use RCPs 2.6, 4.5 and 8.5 (GHG concentration pathways adopted by the Intergovernmental Panel for Climate Change) to describe how well climate change has been mitigated by society in each case. These different scenarios have provided a simple way to understand the interaction of multiple factors so we can enhance resilience, help manage future uncertainty and shape long-term decisions.

Note: The forward-looking scenario analyses above reflect uncertainties about the timing and magnitude of climate change in specific contexts and efforts to mitigate and adapt to climate change, which are without historical precedent. Scenarios are hypothetical constructs and are not intended or designed to represent a full description of the future or deliver precise outcomes; they are not forecasts or predictions, nor are they sensitivity analyses.

Twin track approach to climate change

We have been managing adaptation and mitigation for many years, aligning our approach to become more efficient and effective in our response. Our twin track approach to climate change is central to our purpose to provide great water and more for the North West.



Metrics and targets

TCFD definition

The metrics and targets used to assess and manage climate-related risks and opportunities.

Progress this year

- The first UK water company to have targets verified by the SBTi, including for scope 3 emissions. Achieved our pledge 6.
- Delivered pledge 2: 100 per cent of electricity purchased has been renewable since October 2021.
- Reduced scope 1 and 2 emissions by 2.2 per cent (gross) and 3.5 per cent (net) compared to our baseline year 2019/20.
- Improved data collection and tracking of fuel use enabling targeted interventions.

Future focus

- Data improvements for scope 3 emissions with more supplier and product-based estimates, rather than spend-based.
- Work to validate our long-term net zero ambition to the new SBTi Net Zero Standard.
- Use BEIS carbon values as an internal carbon price in our planning for medium and long-term investments, including PR24 (e.g. for 2030 we use the low case value of £140/tCO₂e).

Metrics to assess climate-related risks

Our vulnerability to climate-related risks is determined by two factors: the physical and transitional impacts we experience and the control measures we have put in place to manage the risks and realise opportunities. To manage our physical risks effectively we must track and understand patterns of weather, and weather events, and learn how they can affect us operationally. To do this we have been working with the Met Office to use both their short-term forecasts and longer-term projections, planning for up to a 4°C change in global temperature. We monitor factors relating to transitional risks, including energy pricing (of both fossil fuels and low carbon alternatives), carbon pricing (through purchasable credits, offsets and certificates), and the marketplace for the availability and cost of alternative fuelled vehicles, batteries and for emerging technologies to reduce process and fugitive emissions.

Metrics to manage climate-related risks

We manage our climate-related risks by putting in place controls such as those as set out on page 46 to 49 and in Appendix A.3 of the climate change adaptation report. The effectiveness of these controls is seen in our operational performance metrics. The following metrics are recognised as key to our resilience to a changing climate and are reported in the annual performance report:

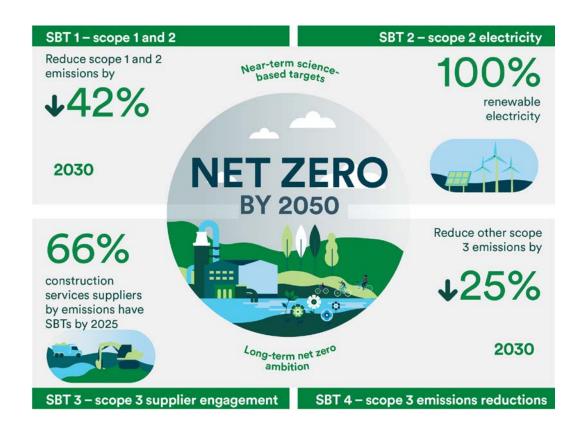
- External flooding incidents;
- Hydraulic external flood risk resilience;
- Hydraulic internal flood risk resilience;
- Internal sewer flooding;
- Leakage;

- Per capita consumption;
- Raising customer awareness to reduce the risk of flooding;
- Areas of low water pressure;
- Risk of severe restrictions in a drought;
- Risk of sewer flooding in a storm;
- Sewer collapses;
- Unplanned outages;
- Water service resilience; and
- Water supply interruptions.

Science-based targets

We have a strong track record of playing our part to mitigate climate change and have reduced scope 1 and 2 emissions by over 70 per cent since 2005/06, largely through our substantial investment in renewable power generation and green energy procurement. Our ambition and commitments are based on international guidance and climate science and we were delighted in July 2021 that our four near-term science-based targets were verified by the Science Based Targets initiative (SBTi). In October, the remainder of our purchased electricity switched to a renewable tariff backed by Renewable Energy Guarantees of Origin certificates, meaning that in the future 100 per cent of our purchased electricity will be from renewable sources enabling us to deliver on our carbon pledge and our SBT. The SBTi Net Zero Standard was launched in late 2021 and we have committed to validate our 2050 ambition to this standard when we revise and revalidate our near-term targets in advance of 2025.

As well as our company-specific science-based targets, we share the UK water sector ambition for key operational emissions to be net zero from 2030. Note that this target has a smaller scope than SBTi and allows use of purchased credits, using agreed offsetting principles.



Energy and carbon report

The Companies Act 2006 (Strategic Report and Directors' Reports) Regulations require us to publish this energy and carbon report applying the 2019 UK Government Environmental Reporting Guidelines, including the Streamlined Energy and Carbon Reporting Guidance (SECR).

We use the financial control approach so our energy and carbon accounting is aligned with the consolidated financial statements for United Utilities Group PLC for 1 April 2021 to 31 March 2022. This includes subsidiaries listed in section A8 on page 262 of the UUG 2022 Annual Report and financial statements.

Energy strategy

Our energy management strategy has four objectives:

- Efficient use of energy;
- Maximising self-generation and direct supply opportunities;
- Reducing costs (through time of use); and
- Supply resilience to ensure we can deliver our services.

In 2021/22, we set a record for renewable energy generation of 210 GWh through focus on end-to-end performance of our bioresources operations, which produce electricity, heat and biomethane. We completed more solar installations during the year.

Each year we serve a growing population, driving increased energy use as we strive to achieve environmental performance targets. We seek to mitigate this through our energy management programme and in recent years have maintained consistent energy use in the face of these considerable upward pressures.

Energy efficiency actions taken

Our approach to energy efficiency is based on continuous improvement of:

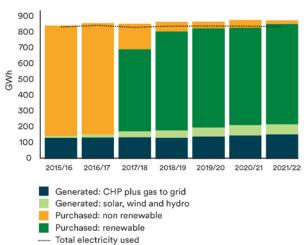
- people optimising ways of working;
- systems improving visibility of use and analysis of data systems; and
- technology targeted investment to remove technological inefficiencies.

Our Energy Management Programme is now firmly established and working well after activities were restricted during COVID-19. The programme carries out site-based workshops and develops ways of working to optimise operations at sites and local area and is underpinned by e-learning packages and a comprehensive energy performance reporting and analysis capability.

To support reporting and analysis, we have invested over recent years to capture data from our fiscal meters and have installed thousands of sub-meters. The resulting data is used to identify opportunities, assess impacts and benefits of trials and maintain good performance. We are piloting analytics to support pump optimisation interventions.

We have a dedicated investment programme to implement targeted energy saving opportunities for existing operations and we focus on ensuring efficient outcomes from our capital programme. Examples of invest-to-save projects include pump optimisation, time-of-use actions and improved control of wastewater treatment.

Electricity use, purchase and self-generation (1)



(1) Electricity purchased plus self-generated is in excess of that used. The difference is what was exported to the grid.

1, , , , , ,			Ü
	2021/22	2020/21	2019/20
	GWh	GWh	GWh
Energy use			
Electricity	803.3	807.3	802.3
Natural gas	33.8	40.0	38.3
Other fuels ⁽¹⁾	123.1	104.0	116.3
Total energy use	960.2	951.3	956.9
Electricity purchased			
Renewable tariff – half hourly ⁽²⁾	589.4	591.4	602.9
Standard tariff – non-half hourly ⁽³⁾	22.3	47.8	40.8
Renewable tariff – non-half hourly ⁽³⁾	21.6	_	
Total electricity purchased	633.3	639.2	643.7
Renewable energy generated			
CHP	133.8	127.6	121.5
Solar	47.8	50.7	42.6
Wind	4.8	5.3	5.7
Hydro	7.2	6.9	6.8
Biomethane ⁽⁴⁾	15.9	14.8	14.2
Total renewable energy generated	209.5	205.3	190.8
Renewable energy exported			
Electricity ⁽⁵⁾	23.5	22.4	18.1
Biomethane ⁽⁴⁾	15.9	14.8	14.2
Total renewable energy exported	39.4	37.2	32.3

- 1. Other fuels includes liquid fuel purchased for processing and transport plus business mileage in private vehicles converted to GWh using 2021 UK Government GHG Conversion Factors for Company Reporting.
- 2. Half hourly supply has been on a renewable tariff with 0g CO₂e/kWh emissions since June 2017.
- 3. Non half hourly metered supplies were on a standard tariff up to the end of September 2021. The emissions were 289g CO_2e/kWh in 2019/20, 178g CO_2e/kWh in 2020/21 and 188g CO_2e/kWh in 2020/21. Non half hourly supplies moved to a new supplier on a Og CO_2e/kWh renewable tariff on 1 October 2021.
- 4. Biomethane generated and exported to grid is expressed as an electricity equivalent.
- 5. Electricity exported was generated by solar, wind and hydro.

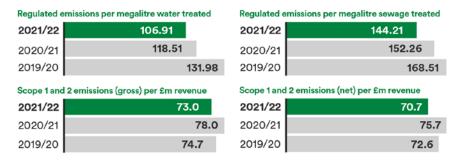
Our approach to climate change

Greenhouse gas emissions

Our carbon footprint is calculated by estimating the individual greenhouse gases that result from all United Utilities' activities, converted into a carbon dioxide equivalent (tCO2e). We report scope 1, 2 and all relevant scope 3 emissions. Emissions have been estimated using the UK water industry Carbon Accounting Workbook v16 (CAW v16), the 2021 UK Government GHG conversion factors for company reporting and CEDA (Comprehensive Environmental Data Archive) factors. Our greenhouse gas inventory has been independently verified and certified by Toitu carbonreduce programme, as aligned to the GHG Protocol Corporate Accounting and Reporting Standard (2015) and the international carbon reporting standard ISO 14064, Part 1:2018.

United Utilities' greenhouse gas emissions intensity

As in previous years, we state our emissions as tonnes CO2 equivalent per £million revenue. We include scope 1 and 2 (market-based) emissions only in this measure. We also report the regulated emissions kilograms CO2 equivalent per megalitre treated (using the location-based method as calculated in the CAW v16), as these are common metrics for our industry.



Scope 1 - Emissions from activities we own or control, e.g. burning fossil fuels, wastewater and sludge processing.

Scope 2 - Emissions from purchased electricity.

			SBT baseline
	2021/22	2020/21	2019/20
SCOPE 1 & 2 GREENHOUSE GAS EMISSIONS	tCO2e	tCO2e	tCO2e
Scope 1 Direct emissions			
Direct emissions from burning of fossil fuels	19,207	17,371	15,247
Process and fugitive emissions from our			
treatment works – including refrigerants	96,020	98,569	96,186
Transport: company-owned or leased vehicles	16,507	16,634	15,739
Total scope 1	131,735	132,574	127,172

Scope 2 Energy indirect emiss	ions			
Grid electricity purchased	Market-based ⁽¹⁾	4,201	8,507	11,789
	Location-based ⁽²⁾	134,492	149,030	164,521
Total scope 2	Market-based	4,201	8,507	11,789
	Location-based	134,492	149,030	164,521
TOTAL SCOPE 1 & 2 (GROSS)	Market-based	135,936	141,082	138,961
	Location-based	266,226	281,604	291,693
Avoided emissions				
Renewable electricity exported	d	-4,317	-4,184	-3,979
Biomethane exported	Market-based ⁽³⁾	0	0	0
	Location-based	-10,283	-9,725	-9,302
Green tariff electricity purchased	Market-based	n/a	n/a	n/a
	Location-based	-128,604	-154,095	-136,644
Total avoided emissions	Market-based ⁽³⁾	-14,600	-13,909	-13,281
TOTAL SCOPE 1 & 2 (NET)	Market-based ⁽³⁾	131,619	136,897	134,982
	Location-based	118,429	129,680	114,202

^{1.} Market-based figures use emission factors specific to the actual electricity purchased. If electricity is on a standard grid tariff they are calculated using factors from suppliers' public fuel mix disclosures, as shown in energy use table on page 57.

Scope 1 emissions

Wastewater and sludge processes cause 73 per cent of our scope 1 emissions as the gases released, nitrous oxide (N20) and methane (CH4) have much greater global warming potentials than carbon dioxide (CO2).

Our process emissions are currently estimated as a direct function of the amount of wastewater we treat. We are undertaking research with other UK water companies to better quantify these emissions from measured values and to find ways to reduce or capture those emissions for beneficial use.

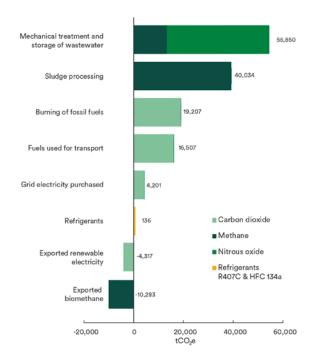
We are investigating and trialling ways to reduce our use of fossil fuels, including for transport, through both efficiencies and use of alternative fuels.

Scope 2 emissions

Our market-based scope 2 emissions have halved this year because we switched our remaining non-renewable purchased electricity to a renewable tariff in October 2021. Next year these emissions will be negligible.

^{2.} Location-based figures use average grid emissions to calculate electricity emissions and are shown in blue.

^{3.} Exported biomethane sold with green gas certificates so has zero avoided emissions in market based accounts. Note in 2022 we have improved disclosure to report both location and market-based methods so the net totals for 2019/20 and 2020/21 have been restated



Scope 3 - Emissions from our value chain, e.g. sludge disposal, business travel and products and services.

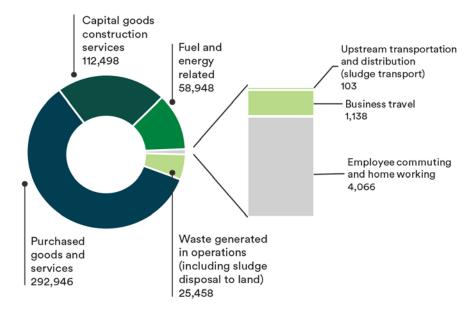
			SBT baseline
	2021/22	2020/21	2019/20
SCOPE 3 GREENHOUSE GAS EMISSIONS	tCO₂e	tCO₂e	tCO₂e
Scope 3 Other indirect emissions			
Category 1: Purchased goods and services ⁽¹⁾	292,946	271,871	213,442
Category 2: Capital goods ⁽¹⁾	112,498	95,968	128,286
Category 3: Fuel and energy-related emissions	58,948	42,599	45,262
Category 4: Upstream transportation and distribution (sludge transport)	103	1,119	3,374
Category 5: Waste generated in operations (including sludge disposal to land)	25,458	26,333	27,936
Category 6: Business travel (public transport, private vehicles and hotel accommodation)	1,138	1,226	3,508
Category 7: Employee commuting and home working	4,066	4,108	4,231
TOTAL SCOPE 3	495,145	443,224	426,039
Scope 3 SBT measure (excluding category 2)	382,647	347,256	297,753

^{1.} For Category 1 and 2 we use CEDA (an EEIO (environmentally-extended input-output) inventory) to estimate emissions. Other categories use actual activity records and UK government conversion factors.

Scope 3 emissions

Like most organisations, most of our scope 3 emissions are in GHG Protocol category 1 (products and services) and category 2 (capital goods); the latter being those provided by our construction services suppliers. We currently calculate category 1 and 2 emissions using records of the amount we have spent. This provides an indicative estimate but does not show the GHG impact of management choices, instead

fluctuating with the scale of our investment programme. This can be seen in our increase in reported emissions this year compared to last. We are working internally and with supply chain partners to enhance relevant data and systems so that we can calculate these emissions based on types and quantities of materials used, thereby showing the full impact of our management choices.



Our approach to Task Force on Nature-related Financial Disclosures (TNFD)

Launching in 2023, the Task Force on Nature-related Financial Disclosure (TNFD) aims to provide a risk and disclosure framework for organisations interacting with the natural environment. It will adopt a four-pillar approach similar to that of TCFD covering governance, strategy, risk management, metrics and targets.

Overview

We are dependent upon, and impact, the natural environment from the quality and quantity of water we abstract for treatment and supply of drinking water, through to treated wastewater we return to rivers and biosolids we recycle to land. We are responsible for over 56,000 hectares of water catchment land.

Given the pressures from climate change and population growth on the natural environment, we do not underestimate the contribution we can make in restoring healthy and resilient ecosystems. We need to work collaboratively with like-minded organisations to deliver nature-based solutions as these offer many benefits including carbon sequestration, cleaner water and improved biodiversity. This is at the heart of our Catchment Systems Thinking Approach (CaST).

We've joined the TNFD forum as a contributing member to help us as we become an early adopter of TNFD reporting.

Governance

Our interactions with the natural environment are broad and complex. Overall accountability rests with executive management who strive to comply with the legal and regulatory requirements as set out in our environmental policy. Matters are regularly reviewed at the board's corporate responsibility committee. The environmental advisory group is a management group with a remit to ensure the delivery of the environmental policy commitments including nature-related strategies (e.g. land, catchment, clean air,

plastics, waste, water quality, water resources, and natural capital). Governance for these strategies is through cross-departmental working groups comprised of subject matter experts and decision makers to drive implementation. Governance around investment in nature-related risks and opportunities is applied as part of our Internal Control Manual.

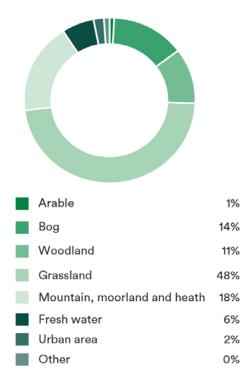
Strategy

Protecting and enhancing the natural environment is a key part of the 'and more' of our purpose. We protect the environment through maintaining compliance and meeting regulatory requirements. We enhance by driving performance, adopting best asset management practices, and investing in nature-based and other environmental solutions. Our environmental policy is underpinned by a framework of strategies and long term plans in response to nature-related risks and opportunities. Some of these plans are statutory requirements, such as the Water Resources Management Plan, and are reviewed every five years as part of the price review process. Our company business plan details the delivery plans for the five years up to 2025.

Our CaST approach enables individual project decisions to be made in the context of the catchment, or system, in which they are situated. This encourages goals to be set in a collaborative way, maximising the benefits that can be achieved and delivering ecosystem resilience through improvements to water quality, flood risk reduction, access to green space, nature recovery, and carbon sequestration.

Much of the land that we own is designated as Sites of Special Scientific Interest (SSSI), which indicates the importance of the habitat for biodiversity. Ninety-four per cent of SSSIs on our land now meet favourable or unfavourable recovering condition status, in part because we pioneered the use of nature-based solutions to address raw water quality when we started our SCaMP programme in 2005. Designated habitats include blanket bog, moorland and heath and are home to many important species. We recognise our role as a steward of our land and make decisions based on the benefits and impacts our operations have on the natural environment. The land we own is made up of different land cover types, such as grassland and woodland.

Land cover types across our land holding



Innovation is embedded in our approach to solving environmental challenges. By understanding and engaging in relevant research we can integrate new technologies and practices to drive environmental enhancements.

Risk management

Many key risks in our risk management assessments are linked to the natural environment. The risk breakdown structure that underpins our operational risk assessment framework includes consequences related to biodiversity, flooding, drought, water quality, recreational access, carbon storage, air quality and waste. Through our longer-term planning processes, we model a range of environmental risks such as a one in 100-year storm or drought and take appropriate action to include mitigation options in the plans. Read more about our risk and resilience framework on pages 62 to 67.

There is a close link between nature and climate change with many pressures on the natural environment becoming more acute as the climate changes. Our climate change adaptation report highlights key physical risks related to the natural environment. Two of our carbon pledges – on tree planting and peatland restoration – are intrinsically linked to the natural environment.

In 2022, we published a discussion document jointly with The Rivers Trust on barriers to nature-based solutions, entitled PR24: Unlocking nature-based solutions to deliver greater value. This identifies some of the key risks associated with the transition to a nature-positive economy and recommendations for collaborative working with the Government and others to address these barriers. We are working with regulators, other water companies and non-governmental organisations to take forward proposals to address these risks.

Metrics and targets

To measure our performance we demonstrate delivery against contributing targets from a number of statutory requirements such as the condition of protected sites, biodiversity net gain, environmental performance and supporting strategies. Our long-term nature-based targets align with government

expectations such as achieving 75 per cent favourable condition for SSSI locations by 2042. We are committed to improving surface, groundwater and bathing water quality in the immediate term and beyond. We will input to the consultation on the Environment Act water targets in 2022 as these will be an important mechanism to drive environmental improvement and meet the objectives for the water environment in the Government's 25-year environment plan.

We are the only water company to set a natural capital outcome delivery incentive in our business plan for 2020–25. This is measured by demonstrating additional value created through ecosystem services for customers and the environment. We achieve this by implementing nature-based solutions where they offer best value compared against a hard-engineered solution (e.g. to improve water quality). Read more about our environmental performance on pages 64 to 67 of the UUG 2022 Annual Report and financial statements.

We were a key contributor to the North West's first natural capital account developed in collaboration with many regional organisations. By considering this baseline value, we can benchmark the impact of future changes to our natural assets and quantify improvements. It is helping to understand how valuable the region's natural capital assets are. In 2022, we will update our own corporate natural capital account as part of a five-yearly review cycle and we will report on this next year.

Next steps

In March 2022, the TNFD unveiled the first version of its nature-related risk-management and disclosure framework. The framework, which will be modified over the next 18 months, is designed to align with the International Sustainability Standards Board, which was officially unveiled at COP26. Working with the Taskforce we will continue to develop how we disclose nature-related information.

Our risk management

Our risk and resilience framework

We have a robust risk and resilience framework for the identification, assessment and mitigation of risk.

Our approach to risk and resilience

Successful management of risks and uncertainties enables us to deliver on our purpose to provide great water and more for the North West, and be more resilient across our corporate, financial and operational structures. A key objective of our approach is to support the sustainable achievement of the strategic themes that underpin our vision to be the best UK water and wastewater company delivering:

- the best service to customers;
- at the lowest sustainable cost; and
- in a responsible manner.

Our risk and resilience framework provides the foundation for the business to anticipate threats to delivering an effective service in these challenging times, and to respond and recover effectively when risks materialise. Key components of the framework include:

- an embedded group-wide risk management process, which is aligned to ISO 31000:2018 risk management guidelines;
- a board-led approach to risk appetite, based on strategic goals;
- a strong and well-established governance structure giving the board oversight of the nature and extent of risks the group faces, as well as the effectiveness of risk management processes and controls; and

• a portfolio of policies, procedures, guidance and training to enable consistent, group-wide participation by our people.

Continuous improvement is a key feature of the framework, which incorporates a maturity assessment model to identify areas to enhance. Based on risk management capabilities relative to five levels of maturity, a recent assessment has supported the development of a road map of improvements. This includes further enhancement to risk appetite and tolerance, greater focus and analysis of cross-cutting themes and improved escalation of data from operational risk management systems.

Risk appetite and tolerance

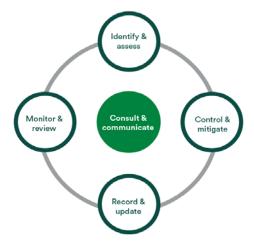
Focused on supporting decision-making, the risk appetite and tolerance framework consists of a package of measures. The General Risk Appetite represents financial limits against which event-based risks are compared at each full and half-year assessment and reporting cycle. In parallel are a series of strategic statements which align directly to the principal risks (see pages 68 to 78). Each statement reflects the strategic intent, strategic theme, relevant stakeholders and governance, but fundamentally emphasises the attitude to risk taking and control relative to four descriptors:

- Averse: A strong opposition to accept risk within business strategy or operational activity.
- Prudent: A reluctance to accept risk within business strategy or operational activity, but careful acceptance within tight boundaries.
- Moderate: Willingness to accept risk with regard to business strategy or operational activity provided this is within reasonable limits.
- Accepting: Willingness to accept risk with regard to business strategy or operational activity.

As a regulated company providing essential public services none of the principal risks have risk accepting as a strategic direction or approach.

Underpinning each strategic statement, and currently under development, are a series of more tangible, tactical statements with specific levels and limits.

How we identify and assess risk



We have a number of mechanisms in place to identify risk. These include a risk universe, cross-business horizon scanning forums, consultation with third parties and comparison with National Risk Registers.

Each risk is event based and is sponsored by a senior manager who is responsible for the analysis of the corresponding causal factors, consequences and the control effectiveness, taking account of both the internal and external business environment. This process quantifies the likelihood of the event occurring

and the full range of potential impacts from a minimum (best case) to a maximum (worst case). Comparing this position against the desired target state, in combination with the strengths, weaknesses and gaps of the control environment, supports the decisions for further mitigation as appropriate. This ongoing analysis culminates in the biannual business unit risk assessment (BURA) which forms part of the governance and reporting process (as outlined opposite) to ensure consistency of approach and a true reflection of the risk facing the company. It also serves to calibrate the most significant risks from a financial and reputational context and to assess how these relate to our risk appetite.

Governance and reporting process

The board ensures that its oversight of risk remains effective, and in compliance with the UK Corporate Governance Code, through a number of established reporting routes.

Twice yearly the board receives an extensive update on the risk profile as part of the full and half-year reporting cycle. This provides an overview of the nature and extent of risk exposure in the context of the group's principal risks (as detailed on pages 68 to 78), and emphasises the most significant event-based risks (summarised on pages 79 to 81) in both their current state relative to the risk appetite, and target state of acceptable exposure. The board is also advised of new and emerging risks (see pages 84 to 85). In addition to the biannual risk reporting, specific risk topics are reported to the board to support decision-making. The board is, therefore, able to:

- make decisions on the level of risk it is prepared to manage relative to risk appetite and tolerance in order to deliver on the group's strategy;
- engage with the business to ensure appropriate controls and mitigation are in place, and test the appropriateness of plans;
- report externally on the long-term viability of the company in an informed manner; and
- monitor and review the effectiveness of risk management procedures and internal control systems.

Risk-specific governance and steering groups manage ongoing individual risks. The operational risk and resilience board provides oversight of asset and operational process, risk and resilience capability, escalates risks and issues to the group audit and risk board (GARB) and contributes to the BURA process.

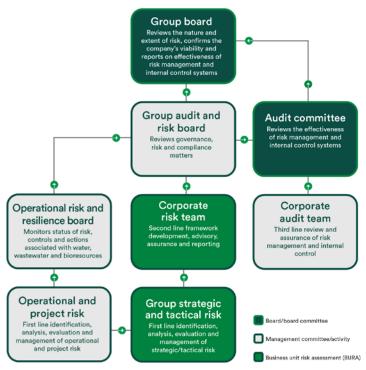
The executive-led GARB focuses on: the adequacy, effectiveness and performance of governance processes; risk management and internal control; monitoring compliance and assurance activities; identification of emerging themes and trends; and resilience across the group.

The audit committee is also a fundamental component of the governance structure. Supported by company secretariat and the corporate audit teams, the audit committee reviews the effectiveness of risk management and internal controls before these are agreed by the board.

Risk profile

The business risk profile is based on the value chain of the company, with the ten principal risks representing inherent risk areas (primary and supportive) where value can be gained, preserved or lost relative to the performance, future prospects or reputation of the company. Underpinning the principal risks, the profile consists of approximately 100 event-based risks, each of which is allocated to one of the ten inherent risk areas based on the context of the event, enabling the company to consider interdependency and correlation of common themes (see pages 67 to 68) and control effectiveness.

The governance and reporting process



Principal risk heat map

The heat map provides an indicative only view of the current risk exposure (likelihood of occurrence and most likely impact) of each of the principal risks relative to each other.

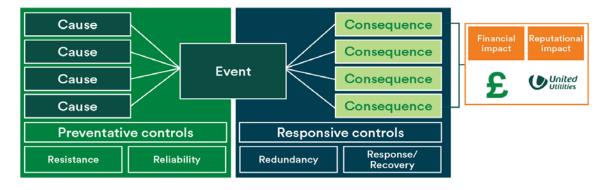
Six of the principal risks have remained relatively stable in the last twelve months with the following four demonstrating an increase in exposure:

- Wastewater service associated with change in legislation
- Supply chain and programme delivery due to economic conditions
- Health, safety and environmental due to the uncertainty of achieving the net zero carbon commitments
- Political and regulatory due to the challenge of delivering customer and environmental improvements whilst maintaining fair value to customers



Common themes

As illustrated in the bow-tie diagram below, each of the event-based risks has multiple causes and consequences, which in turn lead to financial and/or reputational impact. Preventative and responsive controls, which incorporate the four components of resilience (resistance; reliability; redundancy; and response/recovery), are applied to reduce the likelihood of the event occurring and limit the impact if the event were to materialise. New and emerging circumstances in respect of causes, consequences and controls make the profile multifaceted and dynamic. Analysis of the profile highlights common themes, notably associated with the causes and consequences. These common themes can then be considered more holistically, which combined with the analysis of the strengths, weaknesses, gaps and interdependency of control across the business, enables a more integrated approach to risk mitigation.



Common causal themes

The event-based risks include multiple causal factors, which individually or in combination, could trigger the risk event to occur. Categorisation illustrates six common causal themes:

• Extreme weather/climate change: In the majority of cases our water resources, asset base and operations can cope with extreme weather conditions, although these can become overwhelmed in intense situations. Climate change projections highlight increased temperatures, rainfall, wind and more frequent extreme variations in weather patterns. This means that climate change remains a key focus for us, because of its impact on our capacity and capability for service delivery, and because of the effect on the environment that we strive to protect and enhance. We are committed to the principles set by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) – see pages 41 to 60.

- **Demographic changes:** Demographic changes, including population growth and evolving age profiles, can impact the capacity and capability of water and wastewater treatment and network assets; can affect demand on water resources; and increase uncertainty in relation to pension obligations.
- Legislative and regulatory change: Changes in legislation and/or regulation can have implications for the business model, asset base and ways of working. For example: post-Brexit changes in law bring an element of uncertainty; and the introduction of competition, while positive to customers and markets, can affect ongoing revenue and the asset base.
- **Economic conditions:** Macro events can have multiple financial implications, including: lower revenue; increased bad debt; increased operational cost; increased cost of borrowing; and a reduction in the Regulatory Capital Value. The events can also impact the wider supply chain with knock-on effects to our service delivery and cost to serve.
- Asset health: General use, exposure to natural hazards, pressure and load all contribute to the deterioration of assets. In addition, other factors such as technological obsolescence and operating assets beyond their optimal capacity to cope with increased demand (population growth and/or climate change) also affect asset health. Ageing assets, therefore, provide an underlying and cross-business risk and uncertainty both to efficiency and for the long-term resilience of asset integrity and the associated service capability.
- **Culture:** Embedded through processes, reward mechanisms, values and behaviours, corporate culture is important to maintain high performance and cuts across the majority of risks in the profile. In an increasingly challenging business environment, our focus is to continue to embed a culture of innovation, customer service and behaving in a responsible manner at the same time as being open and transparent.

Common consequence themes

Each consequence is analysed for the financial and reputational implications relative to multiple stakeholders. Categorisation of the consequences illustrates four common impact themes:

- **Customers:** Customers are impacted through our service offering, the quality of their experience when dealing with us, and how our operational and capital schemes affect them in the community.
- **Environment:** Our assets, operations and capital programmes can have a significant impact on the environment in both rural and urban settings. As a major land owner and operator of a large fleet of vehicles, the way we manage these also has environmental implications.
- **Investors:** The vast majority of risks in the profile have financial implications that could affect shareholder investment in the short and long term. Reputational impact associated with ethics, environmental protection and efficiency is also relevant for investors' interest in the company.
- **Employees:** Our employees are fundamental to delivering our service requirements as well as our strategic objectives. Equally, our employees can be affected by multiple risks across the business, but primarily in relation to employment and health, safety and wellbeing risks.

Our principal risks

1 Water service

Strategic theme

The best service to customers

Sponsor(s)

Water, wastewater and digital services director

Principal risk description

A failure to provide a secure supply of clean, safe drinking water and the potential for a negative impact on public confidence in water supply.

Causal factors themes (Drivers/influences of risk)

- Climate change
- Demographic change
- Legal and regulatory change
- Asset health

Consequence themes and stakeholder groups

- Customers
- Environment
- Investors

Appetite and tolerance

Water - Averse

Control/mitigation

- Strict quality controls and sampling regime
- Physical and chemical treatment with automation
- Cleaning, maintenance and replacement of assets
- Water resources and production planning
- Pressure/flow management and leak detection
- Integrated network and response capability

Top five event-based business risks (*most significant group risks)

- Failure of Haweswater Aqueduct*
- Water sufficiency*
- Failure to treat water

- Failure of the distribution system (leakage)
- Dam failure*

2 Wastewater service

Strategic theme

The best service to customers

Sponsor(s)

Water, wastewater and digital services director

Principal risk description

The failure to remove, treat and return water to the environment and recycle sludge to land

Causal factors themes (Drivers/influences of risk)

- Climate change
- Demographic change
- Legal and regulatory change
- Asset health

Consequence themes and stakeholder groups

- Customers
- Environment
- Investors

Appetite and tolerance

Wastewater - Prudent

Bioresources - Moderate

Control/mitigation

- Physical and chemical treatment
- Odour management systems
- Drainage and wastewater management plans
- Wastewater network operating model
- Cleaning, maintenance and replacement of assets
- Customer campaigns

Top five event-based business risks (*most significant group risks)

- Wastewater network failure (sewer flooding)*
- Failure to treat sludge*

- Recycling biosolids to agriculture*
- Wastewater treatment (permits)
- Mersey Valley Sludge Pipeline

3 Retail and commercial

Strategic theme

At the lowest sustainable cost

Sponsor(s)

- Customer and people director
- General counsel and company secretary

Principal risk description

Failing to provide good and fair service to domestic customers and third-party retailers or a failure of or issue in relation to non-regulated interests

Causal factors themes (Drivers/influences of risk)

- Legal and regulatory change
- Economic conditions
- Asset health
- Culture

Consequence themes and stakeholder groups

- Customers
- Investors

Appetite and tolerance

Retail - Prudent

Commercial - Moderate

Control/mitigation

- Customer-focused initiatives
- Best practice collection techniques
- Customer segmentation
- Priority Services scheme
- Data management and data sharing
- Non-regulated operation governance

Top five event-based business risks (*most significant group risks)

- Customer experience
- Cash collection
- Billing accuracy
- Wholesale revenue collection
- Developer services

4 Supply chain and programme delivery

Strategic theme

At the lowest sustainable cost

Sponsor(s)

Commercial, capital delivery and engineering director

Principal risk description

The potential ineffective delivery of capital, operational or functional processes/programmes including change.

Causal factors themes (Drivers/influences of risk)

- Legal and regulatory change
- Economic conditions
- Culture

Consequence themes and stakeholder groups

- Communities
- Customers
- Environment
- Investors
- Suppliers

Appetite and tolerance

Supply chain - Prudent

Programme delivery - Moderate

Control/mitigation

- Category management
- Supplier relationship management
- Capital, change and operational programme management

• Portfolio, programme and project risk management

Top five event-based business risks (*most significant group risks)

- Price volatility*
- Unfunded developer programmes
- Security of the supply chain
- Dispute with supplier
- Capital delivery programme

5 Resource

Strategic theme

At the lowest sustainable cost

Sponsor(s)

- Customer and people director
- Health, safety and wellbeing and estate services director
- Water, wastewater and digital services director

Principal risk description

The potential failure to provide appropriate resources (human, technological or physical) required to support business activity.

Causal factors themes (Drivers/influences of risk)

- Climate change
- Legal and regulatory change
- Economic conditions
- Asset health
- Culture

Consequence themes and stakeholder groups

- Customers
- Employees
- Investors

Appetite and tolerance

Resource - Moderate

Control/mitigation

Adoption of effective technology

- Multiple communication channels
- Training and personal development
- Talent, apprentice and graduate schemes
- Change programmes and innovative strategies
- Maintenance, replacement or renovation of assets

Top five event-based business risks (*most significant group risks)

- Land management
- IT asset support
- Loss or failure of NIS systems
- Business critical data
- Employee relations

6 Finance

Strategic theme

At the lowest sustainable cost

Sponsor(s)

Chief financial officer

Principal risk description

The potential inability to finance the business appropriately.

Causal factors themes (Drivers/influences of risk)

- Demographic change
- Legal and regulatory change
- Economic conditions
- Asset health

Consequence themes and stakeholder groups

- Customers
- Employees
- Investors

Appetite and tolerance

Finance - Prudent

Control/mitigation

Long-term refinancing

- Liquidity reserves
- Counterparty credit exposure and settlement limits
- Hedging strategies
- Sensitivity analysis
- Monitoring of the markets

Top five event-based business risks (*most significant group risks)

- Credit ratings*
- Pension scheme funding deficit*
- Financial outperformance*
- Tax efficiency/fair share*
- Totex efficiency challenge*

7 Health, safety and environmental

Strategic theme

In a responsible manner

Sponsor(s)

- Environment, planning and innovation director
- Health, safety and wellbeing and estate services director

Principal risk description

The potential harm to employees, contractors, the public or the environment.

Causal factors themes (Drivers/influences of risk)

- Climate change
- Asset health
- Culture

Consequence themes and stakeholder groups

- Communities
- Employees
- Environment
- Investors

Appetite and tolerance

Health, safety and wellbeing - Averse

Environment - Averse

Control/mitigation

- Strong governance and management systems
- Certification to ISO 45001 and ISO 14001
- Benchmarking, auditing and inspections
- Targeted engagement and improvement programmes
- Carbon reduction initiatives
- Self-generation of energy

Top five event-based business risks (*most significant group risks)

- Carbon commitments*
- Disease pandemic*
- Occupational health exposure
- Minor injuries
- Process safety (bioresources and wastewater)

8 Security

Strategic theme

In a responsible manner

Sponsor(s)

General counsel and company secretary

Principal risk description

The potential for malicious activity (physical or technological) against people, assets or operations.

Causal factors themes (Drivers/influences of risk)

- Economic conditions
- Asset health
- Culture

Consequence themes and stakeholder groups

- Communities
- Customers
- Employees
- Investors

Appetite and tolerance

CNI and SEMD - Averse

Other - Prudent

Control/mitigation

- Physical and technological security measures
- Strong governance, inspections and audits
- Security authority liaison and NIS compliance
- System and network integration
- Business continuity and disaster recovery
- Insurance

Top five event-based business risks (*most significant group risks)

- Cyber*
- Terrorism*
- Criminality
- Fraud
- Data protection

9 Conduct and compliance

Strategic theme

In a responsible manner

Sponsor(s)

- Corporate affairs director
- General counsel and company secretary

Principal risk description

The failure to adopt or apply ethical standards, or to comply with legal and regulatory obligations and responsibilities.

Causal factors themes (Drivers/influences of risk)

- Climate change
- Demographic change
- Legal and regulatory change
- Economic conditions
- Asset health
- Culture

Consequence themes and stakeholder groups

- Communities
- Customers
- Employees
- Environment
- Investors
- Suppliers

Appetite and tolerance

Legislation - Averse

Other - Prudent

Control/mitigation

- Ethical supply chain, diversity and inclusivity policies
- Data classification and levels of authorisation
- Stakeholder engagement activities
- Audits and peer reviews
- Governance, risk assessment and horizon scanning
- Brand comparisons and dashboard of culture metrics

Top five event-based business risks (*most significant group risks)

- Water Plus
- Bribery
- Non-regulated assets
- Procurement compliance
- Corporate governance and listing rules compliance

10 Political and regulatory

Strategic theme

The best service to customers

Sponsor(s)

- Corporate affairs director
- General counsel and company secretary
- Strategy, policy and regulation director

Principal risk description

Developments connected with the political, regulatory and legislative environment

Causal factors themes (Drivers/influences of risk)

- Legal and regulatory change
- Economic conditions

Consequence themes and stakeholder groups

- Customers
- Employees
- Environment
- Investors

Appetite and tolerance

Appetite or tolerance cannot be determined due to no genuine choice or control

Control/mitigation

- Consultation with government and regulators
- Communication with customers

Top five event-based business risks (*most significant group risks)

- Price Review 2024 outcome*
- Upstream competition (bioresources)
- DPC exit HARP
- ASHE index
- Upstream competition (water resource)

Notes

- 1. Principal risks: Based on the value chain of the company, principal risks represent inherent areas where value can be gained, preserved or lost. Water, wastewater (including bioresources) and retail and commercial areas are the primary activities, with all other areas as supportive/contributing activities.
- 2. Appetite and tolerance: Averse: A strong opposition to accept risk within business strategy or operational activity. Prudent: A reluctance to accept risk within business strategy or operational activity, but careful acceptance within tight boundaries. Moderate: Willingness to accept risk with regard to business strategy or operational activity provided this is within reasonable limits. Accepting: Willingness to accept risk with regard to business strategy or operational activity. (NB As a regulated company providing essential public services none of the principal risks have risk accepting as a strategic direction or approach).

The company's most significant event-based risks

The most significant event-based risks represent the ten highest-ranked risks by exposure (likelihood of occurrence of the event multiplied by the most likely financial impact) and those risks which have been assessed as having a significantly high impact, but low likelihood. Depending on the circumstances, financial impacts will include loss of revenue, additional or extra cost, fines, regulatory penalties and compensation. Reputational impact relative to our multiple stakeholders is also assessed, reported and considered as part of the mitigation.

Summarised below are the top ten ranking risks (1–10), and those assessed as having high impact, but low likelihood (A–F):

1. Price Review 2024 outcome

Risk exposure: This risk focuses on the capacity and capability to develop a business plan that creates value for customers, communities, and the environment that is sustainable and resilient for the long term relative to the unique characteristics of the region we serve, in light of multiple influencing factors – notably changing demographics, climate change and asset health.

Control/mitigation: We have established cross-cutting work streams and theme owners to identify the products and evidence required for the submission and we will maintain a close dialogue with Ofwat throughout the process.

Assurance: Extensive customer research and several external providers have been commissioned for technical optioneering. Second line assurance is provided through a dedicated price review team and a PR24 programme board. An internal audit is scheduled and external assurance is currently under procurement.

2. Failure of the Haweswater Aqueduct

Risk exposure: The Haweswater Aqueduct is a key asset with current low resilience due to deterioration, with failure potentially resulting in water quality issues and/or supply interruptions to a large proportion of the United Utilities customer base.

Control/mitigation: A capital project to replace the tunnel sections of the aqueduct has already commenced with the completion in November 2020 of one section. The remaining sections are due to be replaced as part of Haweswater Aqueduct Resilience Programme (HARP) by 2029.

Assurance: Technical and geological advice and modelling have been sought throughout the programme development, with second line assurance including engineering technical governance. Independent assurance is provided by cyclical internal audits and external assurance over the competitively appointed provider.

3. Wastewater network failure (sewer flooding)

Risk exposure: Equipment failure, collapses/bursts or inadequate hydraulic/operational capacity to cope with extreme weather and population growth, resulting in sewer flooding.

Control/mitigation: Preventative maintenance and inspection regimes, customer campaigns and sewer rehabilitation programmes.

Assurance: Second line assurance provided by wholesale assurance, engineering technical governance and flood review panel. Subject to regular internal audits and external assurance of regulatory reporting.

4. Cyber

Risk exposure: Data and technology assets compromised due to malicious or accidental activity, leading to a major impact to key business processes and operations.

Control/mitigation: Multiple layers of control, including a secure perimeter, segmented internal network zones, access controls, constant monitoring and forensic response capability.

Assurance: Security stance reflects multiple sources of threat intelligence. The security steering group provides second line assurance, with independent assurance provided by cyclical internal audits and various technical audits by external specialists.

5. Water sufficiency

Risk exposure: Water sufficiency is one of the most sensitive risks to climate, with the frequency of recent periods of extended hot, dry weather being evidence of changing circumstance and the potential for implementation of water use restrictions on customers.

Control/mitigation: We produce a Water Resources Management Plan (WRMP) every five years, which forecasts future demand and water availability under repeats of historic droughts, adjusted for climate change. A statutory Drought Plan is also developed every five years, setting out the actions we will take in a drought situation.

Assurance: The WRMP and Drought Plan are subject to various second and third line assurance activities prior to publication.

6. Carbon commitments

Risk exposure: This risk focuses on the capacity and capability to decarbonise water and wastewater activity relevant to the Public Interest Commitments (PIC) to achieve net zero by 2030 in light of the growth pressures, lack of technological advances or innovation and the fundamental change of approach required.

Control/mitigation: We will continue to develop near-term initiatives to address process and energy emissions, and create woodland and restore peatland, while responding to an evolving policy and technological landscape. We are also developing a long-term strategy to reduce emissions and to fully understand and optimise potential decarbonisation initiatives and pathways.

Assurance: Water industry research and technical support combined with a climate change mitigation steering group provides second line assurance. An internal audit is scheduled and external assurance of emissions, regulatory reporting lines and science-based targets has been established.

7. Failure to treat sludge

Risk exposure: This risk relates to the interdependency between wastewater and bioresource treatment activity in light of changing demographics, asset health and legislative/regulatory change. Industrial Emissions Directive (IED) now applying to biological treatment of sewage sludge within AMP 7, with no investment assigned to this requirement is a key factor.

Control/mitigation: The Throughput, Reliability, Availability, and Maintainability (T-RAM) of our facilities is a key area of mitigation, with formal service level agreements between the two core activities. In relation to IEDs, discussions at national level are being held to move the high capital cost improvements into PR24.

Assurance: Wholesale assurance and engineering technical governance provide second line assurance. Subject to cyclical internal audit and ad-hoc external strategic reviews.

8. Recycling of biosolids to agriculture

Risk exposure: This risk represents various impact scenarios including operational failures, increased restrictions or total ban of recycling biosolids to agriculture. Referencing the EA's interpretation of the Farming Rules for Water (FRfW) regulations and the increasing threat to recycling a large proportion of biosolids.

Control/mitigation: United Utilities is accredited to the UK Biosolids Assurance Scheme (BAS), which certifies that our treatment and recycling activities meet regulatory requirements and best practice. We also work closely with farmers and landowners and have robust standard operating procedures established with contractors.

Assurance: Wholesale assurance and engineering technical governance provide second line assurance. Subject to both cyclical internal and external audit.

9. Price volatility

Risk exposure: This risk reflects the inflationary pressures across all commodities, notably energy, associated with the post COVID-19 economic bounce back which have been exacerbated further by the conflict in Ukraine.

Control/mitigation: Contract provision with suppliers, hedging policy and supply agreements manage volatility and minimise vulnerability in the contract and price risk with the suppliers including periods of agreed fixed pricing and negotiation of CPI/H uplift on an annual basis.

Assurance: Market analysis and supplier engagement, combined with quarterly business reviews provide second line assurance. Due to the scale of procurement an energy governance panel has oversight over procurement and use.

10. Credit rating

Risk exposure: Credit ratings below internal targets, due to deterioration in financial and/ or operational performance and/or external factors (such as inflation) resulting in more expensive funding.

Control/mitigation: Continuous monitoring of markets, and the management of key financial risks within defined policy parameters

Assurance: Second line assurance provided by financial control and quarterly business reviews, with oversight provided by the treasury committee. The treasury function is subject to regular internal audits.

A. Pension deficit

Risk exposure: The potential for the pension scheme funding deficit to increase because of life expectancy rates leading to additional contributions.

Control/mitigation: Constant monitoring combined with hedging against interest rates, inflation and growth asset risk.

Assurance: Policy and oversight is led by the pensions review management group, taking into account advice from accountancy and law firms. Pension governance is subject to periodic internal audits.

B. Financial outperformance

Risk exposure: Failure to achieve financial outperformance due to macro economic conditions and efficiency challenges, impacting the cost of debt and delivery of the company business plan.

Control/mitigation: Interest rate and inflation management, ongoing monitoring of markets and regulatory developments, and company business planning.

Assurance: Second line assurance and oversight is provided by the board and treasury committee in addition to executive quarterly business reviews. Subject to cyclical internal audit reviews.

C. Dam failure

Risk exposure: Uncontrolled release of a significant volume of water from reservoirs due to flood damage, overtopping, earthquake or erosion leading to catastrophic impacts downstream.

Control/mitigation: Each reservoir is regularly inspected by engineers. Where appropriate, risk reduction interventions are implemented through a prioritised investment programme.

Assurance: Various sources of second line assurance, including supervising engineers, dam safety group, wholesale assurance and regular board reviews. Independent assurance is provided by panel engineers and internal audit.

D. Fair payment of tax

Risk exposure: Failure to maximise the available tax efficiencies and reliefs due to changing mechanisms.

Control/mitigation: Tax policies and objectives cover: efficient structuring of commercial activities; maintaining a robust governance and risk management framework; and an open and transparent relationship with tax authorities.

Assurance: Tax policies are based on advice from multiple sources, including accountancy firms. Third-party assurance is provided by internal audit and accountancy firms.

E. Disease pandemic

Risk exposure: Serious illness in a large proportion of the UK population and consequences to our workforce, the wider supply chain and macro economy.

Control/mitigation: The incident management process would be invoked, supported by the Pandemic Response Plan. This includes the implementation of multi-channel communication with non-pharmaceutical interventions as per government guidance.

Assurance: Wholesale assurance provides second line assurance, with internal audit undertaking various reviews.

F. Terrorism

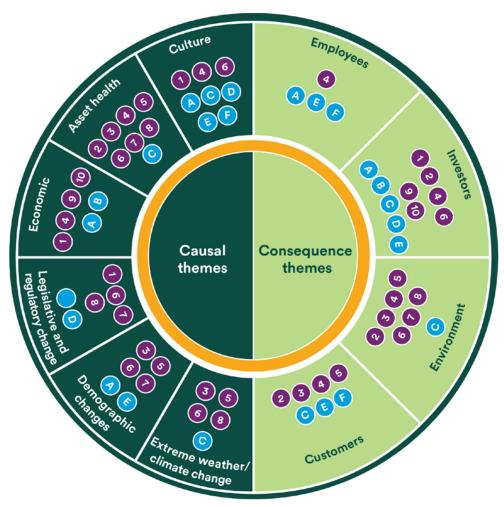
Risk exposure: A significant asset to be compromised by terrorist activity leading to loss of supply, contamination and/or pollution.

Control/mitigation: A risk-based protection of assets in line with the Security and Emergency Measures Direction (SEMD) and close liaison with the Centre for the Protection of National Infrastructure (CPNI), regional counter terrorist units, local agencies and emergency services.

Assurance: Security posture is based on various threat advisors. Second line assurance is provided by the security steering group. In addition, internal audit undertakes cyclical audits with external technical assurance being delivered by specialists.

Mapping of common themes to the most significant group risks

The diagram below illustrates how the common themes (causal and consequence) relate to the company's most significant event-based risks, demonstrating how new and emerging circumstances can not only influence the risk exposure, but also focus attention for control and mitigation.



Most significant event-based risks Key: Price Review 2024 outcome Price volatility Top ten ranking risks relative to likelihood and impact 2 Failure of Haweswater Aqueduct Credit rating High impact, low likelihood risks Wastewater network failure (sewer flooding) Pension deficit 4 Cyber Financial outperformance Water sufficiency Dam failure Carbon commitments Fair payment of tax Failure to treat sludge Disease pandemic 8 Recycling of biosolids to agriculture Terrorism

New and emerging risks

Following horizon scanning activity undertaken by the business, a watching brief is held over risks/issues which are worthy of note due to their new, emerging or reputational status, and typically have too high levels of uncertainty or complexity to quantify.

- **Plastics:** Attention on single-use plastic and microplastic (plastics less than 5 mm) pollution is ongoing, with their presence in the environment being linked to the water cycle. We are responding proactively and have formed a two pillar approach to addressing plastics, focusing on operational plastic waste and plastic in the water cycle.
- Perfluoroalkyl and polyfluoroalkyl substances (PFAS): There is a growing focus on PFAS chemicals including from our public liability insurers who are looking to exclude related liability claims. PFAS are manufactured chemicals used in everyday products. Known as 'forever chemicals', they are persistent, bioaccumulate and may be toxic even at low levels. We have completed an assessment of the likely presence of PFAS in raw water sources, the results of which are incorporated into the Drinking Water Safety Plan and aligned to the requirements set out by the Drinking Water Inspectorate.

Material litigation

The group robustly defends litigation where appropriate and seeks to minimise its exposure by establishing provisions and seeking recovery wherever possible. Litigation of a material nature is regularly reported to the group board.

In relation to the Manchester Ship Canal Company matter reported in previous years, a hearing was held in the Court of Appeal at the end of March 2022. A decision is expected during summer 2022, which may provide further clarity in relation to the rights and remedies afforded to the parties and others in relation to discharges by water companies into the canal and other watercourses.

Beyond this, there is nothing to report regarding material litigation, including in respect of the Argentina multiparty 'class action' reported on in previous years, and to which there have been no material developments.

Conflict in Ukraine

The conflict in Ukraine has led to a number of risks emerging (growing, developing or becoming more prominent) from a security and economic perspective.

- **Cyber:** The likelihood of the cyber risk has been increased to reflect the rising tensions between Russia and the west, while taking into account the adoption of increased security measures which include security operations teams on extended high alert and the rapid deployment of technical blocking of critical indicators of compromise.
- **Price volatility:** This risk reflects inflationary uplift across multiple commodities with energy the most volatile.
- **Security of the supply chain:** This risk reflects the knock on impact of inflationary pressure on manufacturing output with some production facilities reducing operations. It also reflects sanctions imposed against Russia and Belarus and the restriction or prevention of access to certain goods.
- **Cash collection:** Inflationary pressure is having a significant impact on the cost of living, affecting customers' ability to pay bills.
- **Supplier viability:** This risk reflects the impact the unprecedented price increases are having on suppliers who cannot honour locked prices in contracts and the threat of suppliers going into administration with a knock-on effect to operations and the capital delivery programme.

• **Credit rating:** Whilst underlying credit quality is not a concern, the impact of high inflation on finance expense results in the potential for Credit Agency thresholds to be breached when combined with other factors such as additional investment spend to meet environmental and service improvements over and above price review allowances.

Legislative/regulatory change

In addition to the emerging economic conditions exacerbated by the conflict in Ukraine, legislative and regulatory change is also a prominent emerging theme which impacts a number of event-based risks.

Relatively recent developments include uncertainty associated with the Environment Agency's interpretation of the Industrial Emissions Directive (IED) and Farming Rules for Water (FRfW) and implications for ongoing compliance, process and investment across wastewater and bioresources risk.

As a responsible company, United Utilities is committed to the protection and enhancement of the environment and can demonstrate many previous and current initiatives, the most recent being the road map to 'better river health' including a pledge to invest £230 million into 184 kilometres of rivers by 2025. We will continue to work closely with all our regulators and partners to deliver better solutions including full cooperation with the ongoing industry wide investigation by Ofwat and the Environment Agency into possible unpermitted sewage discharges into rivers and watercourses.

The Environment Act, which was enacted in November 2021, has potentially far more significant implications for the water sector, due to it being the UK's new framework of environmental protection. Depending on how the new legislation will be interpreted and applied, meeting its requirements may demand a fundamental shift in the water industry's approach to environmental risks, requiring significant investment across multiple AMPs.

The directors present their report and the audited financial statements of United Utilities PLC and its subsidiaries for the year ended 31 March 2022.

Business model

A description of the company's business model can be found within the strategic report on pages 5 to 8.

United Utilities PLC ("UUPLC") is a subsidiary of United Utilities Group PLC ("UUG"), which is the ultimate parent of the United Utilities group.

Profit and dividends

The results for the year, set out in the consolidated income statement on page 107 show that the loss for the year after tax was £39.9 million (2021: profit after tax of £472.9 million).

The directors have not recommended a final ordinary dividend (2021: £nil). Interim ordinary dividends of £295.5 million (2021: £291.9 million).

Principal activity and review of business

The company is a public limited company registered in England and Wales.

The company is the intermediate holding company of a group which owns and operates water and wastewater assets in the North West of England. There have not been any significant changes in the company's principal activity in the year under review and no changes are currently planned.

The company's principal subsidiary undertakings, and joint ventures in which the group participates, are listed in note A8 to the consolidated financial statements.

The ultimate parent company of United Utilities PLC is United Utilities Group PLC.

Share capital

At 31 March 2022, the issued ordinary share capital of the company was £881.8 million (2021: £881.8 million) divided into 881,787,478 ordinary shares of £1.00 each and one deferred A share of £1.00.

The company has one class of ordinary shares which carry no right to fixed income. The deferred A share carries no voting rights nor a right to fixed income.

Events after the reporting period

Details of events occurring after the reporting period are included in note 25 of the financial statements.

Going concern basis of accounting

The directors consider it appropriate to prepare the financial statements on the going concern basis, as explained in the basis of preparation paragraph on page 109.

Directors

The directors who held office during the year and to date are given below:

PA Aspin

GL Baron

RJ Lee

SL Mogford

BF Murphy

Directors' indemnities and insurance

We have in place contractual entitlements for the directors of the company and of its subsidiaries to claim indemnification by the company in respect of certain liabilities which might be incurred by them in the course of their duties as directors. These arrangements, which constitute qualifying third-party indemnity provision and qualifying pension scheme indemnity provision, have been established in compliance with the relevant provisions of the Companies Act 2006 and have been in force throughout the financial year. They include provision for the company to fund the costs incurred by directors in defending certain claims against them in relation to their duties as directors of the company or its subsidiaries. The company maintains an appropriate level of directors' and officers' liability insurance.

Employees

Our policies on employee consultation and on equal opportunities for all employees can be found on pages 22 and 24 of the UUG 2022 Annual Report. Applicants with disabilities are given equal consideration in our application process, and disabled colleagues have equipment and working practices modified for them as far as possible and where it is safe and practical to do so. Importance is placed on strengthening employees' engagement (see page 30 of the UUG 2022 Annual Report). The effect of our regard towards employees in relation to the decisions taken during the financial year is included in our S172 (1) Statement on page 20. Employees are encouraged to own shares in UUG through the operation of an all employee share incentive plan (ShareBuy). Information on the group's average number of employees during the year, can be found in note 3 on page 164.

Political and charitable donations

It is the company's policy position that we do not support any political party and do not make what are commonly regarded as donations to any political party or other political organisations. However, the wide definition of donations in the Political Parties, Elections and Referendums Act 2000 covers activities which form part of the necessary relationship between the group and our political stakeholders. This can include promoting United Utilities' activities at the main political parties' annual conferences, and occasional stakeholder engagement in Westminster. The group incurred expenditure during the year of £15,834 (2021: £5,801; 2020: £23,627) as part of this process. At the 2021 UUG AGM, an authority was taken to cover such expenditure. A similar resolution will be put to UUG shareholders at the 2022 UUG AGM to authorise such expenditure.

As the provider of services to 7 million people across the North West, customers can sometimes contact their constituency MP and ask that they raise an issue with the company on their behalf. In 2021/22, we received 378 such contacts from MPs' offices covering topics, including flooding, water supply and land management. As part of our work to build constructive relationships with all our stakeholders, we encourage MPs and members of their offices to work closely with us to address constituency concerns and arrange case worker events to discuss such issues in detail. Throughout the year, when COVID-19 guidelines allowed, we held face-to-face meetings with key MPs to discuss a number of topics, including river water quality, storm overflows and recreational land management.

We engage regularly with the two devolved administrations in the North West – the Greater Manchester Combined Authority (GMCA) and the Liverpool City Region (LCR) –as well as the region's local authorities, on a range of topics of shared interest, such as tackling flooding risk and enhancing the North West's natural capital. Our sponsorship of the All-party Political Groups for GMCA and LCR helps bring MPs and peers of all parties together with key leaders to help maximise future investment in these areas for the benefit of local communities.

In addition, the company's activities to engage with political stakeholders on matters relevant to the water industry and its operating footprint in the North West extend to its membership of trade associations. This is described in the section below.

Trade associations

We are members of a small number of trade associations. Some of these have a national focus, such as Water UK, the representative body of the UK water industry, and the Confederation of British Industry. Others focus on specific professions such as the 100 Group representing the views of the finance directors of FTSE 100 and large UK private companies and the GC 100, the voice of general counsel and company secretaries in FTSE 100 companies. The company is a member of regional bodies, such as the North West Business Leadership Team which encourages engagement across the public and private sectors to promote the sustainable economic development and long-term wellbeing of the North West. Our total contribution to these associations in 2021/22 was £408,441 (2020/21: £420,403).

Through Water UK, the company has supported efforts to interact with parliamentary bodies, such as Select Committees and Chairs of specific committees, provide information on topics such as the performance of storm overflows in relation to river water quality. The company supported Water UK in its effort to engage the Government as the Environment Bill passed through its parliamentary stages, including preparation of the 21st century rivers report.

Through our membership with both the CBI, in particular as a member of its North West regional council, and the North West Business Leadership Team, we have engaged with regional MPs and political stakeholders, such as local authorities and metro mayors, to explore how the business community can work more effectively with the public sector to drive economic growth in the region and tackle some of the North West's pressing social issues. For example, we have participated in discussions as part of the unlocking regional growth/levelling up agenda, and employee resilience and wellbeing.

Approach to technology development

We are committed to using innovative, cost-effective and practical solutions for providing high-quality services and we recognise the importance of ensuring that we focus our investment on the development of technology and that we have the right skills to apply technology to achieve sustainable competitive advantage and that we continue to be alert to emerging technological opportunities.

Environmental, social and community matters

Details of our approach, as a responsible business, is set out in the Strategic Report, in particular where we describe our approach to purpose and stakeholder value on pages 3 to 4. Further information is available on our website at www.unitedutilities.com/corporate/responsibility/. Our approach to engagement with our environmental stakeholders and those in the communities we serve can be found on pages 10 to 12. The effect of our regard towards the environment, social and community matters in relation to the decisions taken during the financial year is included in our S172 (1) Statement on page 13.

Our slavery and human trafficking statement can be found on our website at: unitedutilities.com/human-rights.

Customers and suppliers and key stakeholders

Our approach to engagement with customers, suppliers, regulators and other key stakeholders can be found on pages 10 to 12. The effect of our regard towards customers, suppliers, regulators and other key stakeholders in relation to the decisions taken during the financial year is included in our S172 (1) Statement on page 13. Our United Supply Chain approach sets out how we work with our suppliers, which can be found on our website at: unitedutilities.com/corporate/about-us/governance/suppliers/delivering-value/united-supplychain/; we are a signatory to the Prompt Payment Code. We publish key statistics and other information on our payment practices in line with the Duty to Report on Payment Practices and Performance on the Department for Business, Energy & Industrial Strategy's website. Information is published on a six-monthly basis. For the six months to 31 March 2022, our average time taken to pay invoices was 13 days; in the previous six months it was 13 days.

Energy and Carbon

Our TCFD reporting includes our energy and carbon report on pages 54 to 67 and is hereby incorporated by reference into this directors' report.

Financial instruments

Our risk management objectives and policies in relation to the use of financial instruments can be found in note A4 to the financial statements.

Internal controls and risk management

The board is responsible for ensuring that the company has sound risk management and internal control systems in place, and for reviewing its effectiveness. It is supported in this role by the audit committee of UUG, the internal audit function, the financial control team and the external auditor. The key features of this internal control framework include policies and procedures for planning, approving and monitoring major capital expenditure and clearly defined comprehensive business planning and financial reporting procedures, and monthly meetings by the executive team to review financial and non-financial performance and key operational issues. Alongside these processes, risk management is well embedded in our ongoing business as usual approach. All areas of the business and support departments are responsible for monitoring changes to their areas of activity, identifying any associated risks as a result of these changes which might prevent us from achieving our objectives, and identifying actions to mitigate those risks as far as is reasonably practicable and cost-effective to do so. These internal control and risk management systems, which are designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss, have been in place continually for the year under review.

On behalf of the board, the audit committee of UUG completed its annual review of the effectiveness of the risk management and internal control processes up to the date of the annual report in accordance with the FRC Guidance on Risk Management, Internal Control and Related Financial and Business Reporting. There were no significant failings or weaknesses identified in this review.

The principal risks and uncertainties to the business are explained on pages 68 to 85. We continue to work with all key parties to represent the best interests of our stakeholders, and where we can identify actions to mitigate the adverse consequences of these risks we work hard to address them.

Information given to the auditor

Each of the persons who is a director at the date of approval of this report confirms that:

- 1. so far as they are aware, there is no relevant audit information of which the company's auditor is unaware; and
- 2. they have taken all the steps that he ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the company's auditor is aware of that information. This confirmation is given, and should be interpreted, in accordance with the provisions of s418 of the Companies Act 2006.

External auditor

KPMG are appointed as statutory auditor to all wholly owned companies in the United Utilities group. The company adheres to the UUG policy on non-audit services provided by the external auditor and in relation to auditor independence (see pages 150 to 151 of the UUG 2022 Annual report and financial statements).

The UUG board has decided to recommend KPMG LLP to be reappointed as external auditor to the company at the forthcoming UUG AGM of and an authority for the directors to set the remuneration of the auditor will be sought.

Approved by the board and signed on its behalf by:

PA Aspin Chief Financial Officer 28 June 2022

Statement of directors' responsibilities in respect of the annual report, the strategic report, the directors' report and the financial statements

The directors are responsible for preparing the Annual Report and the Group and parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and parent Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with UK-adopted international accounting standards and applicable law and have elected to prepare the parent Company financial statements on the same basis.

Under company law the directors must not approve the financial statements 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 their profit or loss for that period. In preparing each of the Group and parent Company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- state whether they have been prepared in accordance with UK-adopted international accounting standards;
- assess the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic Report, Directors' Report, and Corporate Governance Statement that complies with that law and those regulations.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Statement of directors' responsibilities in respect of the annual report, the strategic report, the directors' report and the financial statements

Responsibility statement of the directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the strategic report and directors' reports include a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

Signed on behalf of the board:

PA Aspin Chief Financial Officer 28 June 2022

to the members of United Utilities PLC

1. Our opinion is unmodified

We have audited the financial statements of United Utilities PLC ("the Company") for the year ended 31 March 2022 which comprise the Consolidated income statement, the Consolidated statement of comprehensive income, the Consolidated and company statements of financial position, the Consolidated statement of changes in equity, the Company statement of changes in equity, the Consolidated and company statements of cash flows, and the related notes, including the accounting policies on pages 172 to 182.

In our opinion:

- the financial statements 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 loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK-adopted international accounting standards;
- the parent Company financial statements have been properly prepared in accordance with UKadopted international accounting standards and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the Board.

We were first appointed as auditor by the directors on 22 July 2011. The period of total uninterrupted engagement is for the 11 financial years ended 31 March 2022. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including 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. We summarise below the key audit matters, in decreasing order of audit significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

to the members of United Utilities PLC

Revenue recognition and provisions for household customer debt

Revenue not recognised: £26.6m (2021: £27.1m)

Provision for customer debts: £78.3m (2021: £74.9m)

Refer to pages 111-113, 172-173, and 177 (accounting policy) and pages 111-113, 115, and 128-129 (financial disclosures).

The risk

Subjective estimate

At each balance sheet date:

- judgement is required to identify properties where there is little prospect that cash will be received for revenue that has been billed due to either the occupier not being able to be identified or a past history of non-payment of bills relating to that property and therefore whether the revenue should be recognised; and
- assumptions involving a high degree of estimation uncertainty are required to assess the recoverability of trade receivables.

The effect of these matters is that, as part of our risk assessment, we determined that recognition of revenue and the recoverability of trade receivables has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (see accounting policies on pages 111 to 112) disclose the sensitivity estimated by the Group.

Our response

We performed the tests below rather than seeking to rely on the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described.

Our procedures included:

- Accounting analysis: assessed the derecognition of revenue for compliance with relevant accounting standards where the collection of consideration is not probable on the date of initial recognition;
- Methodology choice: assessed the appropriateness of the customer debt provisioning policy based on historical cash collections, credits, re-bills and write-off information, and estimates of future economic scenarios and their impact on credit losses;
- Sensitivity analysis: considered the sensitivity of the key assumptions; and
- Assessing transparency: assessed the adequacy of the Group's disclosures of its revenue recognition and customer debt provisioning policies, including the judgement involved in recording revenue and estimation uncertainty of the doubtful debts provision.

Our results

- We found the amount of the revenue recognised to be acceptable (2021: acceptable);
- We considered the level of doubtful debt provisioning to be acceptable (2021: acceptable).

to the members of United Utilities PLC

Capitalisation of costs relating to the capital programme

Property, plant & equipment additions: £728.5m (2021: £677.5m)

Refer to pages 113 and 174-176 (accounting policy) and pages 123-125 (financial disclosures).

The risk

Subjective classification

The Group has a substantial capital programme which has been agreed with the Water Services Regulation Authority (Ofwat) and therefore incurs significant annual expenditure in relation to the development and maintenance of both infrastructure and non-infrastructure assets.

The determination of in year project costs as capital or operating expenditure is inherently judgemental. We determined that the costs capitalised has a high degree of judgement, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (see accounting policies on page 113) disclose the sensitivity estimated by the Group.

Our response

We performed the detailed tests below rather than seeking to rely on any of the group's controls because our knowledge of the design of these controls indicated that we would not be able to obtain the required evidence to support reliance on controls.

Our procedures included:

- Accounting analysis: assessed the Group's capitalisation policy for compliance with relevant accounting standards;
- Tests of details: critically assessed the capital nature of a sample of projects against the capitalisation policy focusing on new projects approved, project overspend, forecast cost to complete;
- Assessing transparency: assessed the adequacy of the Group's disclosures of its capitalisation policy including the judgement involved in assessing expenditure as capital.

Our results

 We found the Group's classification of expenditure as capital or operating to be acceptable (2021: acceptable).

to the members of United Utilities PLC

Valuation of retirement benefit obligations

£3,018.9m (2021: £3,295.7m)

Refer to pages 113 and 179-180 (accounting policy) and pages 132-133 and 161-169 (financial disclosures).

The risk

Subjective valuation

The valuation of the retirement benefit obligations depends on a number of estimates, including the discount rates used to calculate the current value of the future payments to pensioners, the rate of inflation that must be incorporated in the estimate of the future pension payments, and the life expectancy of pension scheme members.

There is a considerable amount of estimation uncertainty involved in setting the above assumptions and a small change in the assumptions and estimates may have a significant impact on the retirement benefit obligations.

The effect of these matters is that, as part of our risk assessment, we determined that the gross defined benefit pension obligations has a high degree of estimation uncertainty, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole, and possibly many times that amount. The financial statements (see accounting policies on page 113) disclose the sensitivity estimated by the Group.

Our response

We performed the tests below rather than seeking to rely on the Group's controls because the nature of the balance is such that we would expect to obtain audit evidence primarily through the detailed procedures described.

Our procedures included:

- Our actuarial expertise: used our own actuarial specialists to challenge key assumptions and estimates used in the calculation of the retirement benefit obligations; and perform a comparison of key assumptions against our own benchmark ranges derived from externally-available data and against those used by other companies reporting on the same period;
- Methodology assessment: used our own actuarial specialists to assess the appropriateness and consistency of the methodology applied by management in setting the key assumptions;
- Assessing external actuary's credentials: assessed competence and independence of the external actuary engaged by the Group; and
- Assessing transparency: considered the adequacy of the Group's disclosure in respect of retirement benefits, in particular the gross defined benefit obligation and the assumptions used, which are set out in notes 18 and A5 to the financial statements.

Our results

 We found the resulting estimate of the retirement benefit obligations to be acceptable (2021: acceptable).

to the members of United Utilities PLC

Recoverability of parent Company's investment in United Utilities North West Limited

Investment in United Utilities North West Limited - £3,907.1m (2021: £3,907.1m)

Refer to pages 172 and 176 (accounting policy) and page 127 (financial disclosures).

The risk

Low risk, high value

The carrying amount of the parent company's investment in United Utilities North West Limited represents 57% (2021: 52%) of the company's total assets. The recoverability is not at a high risk of significant misstatement or subject to significant judgement. However, due to the materiality in the context of the parent company financial statements, this is considered to be the area that had the greatest effect on our overall parent company audit.

Our response

We performed the tests below rather than seeking to rely on any of the Company's controls because testing for recoverability through detailed testing is inherently the most effective means of obtaining audit evidence.

Our procedures included:

Tests of detail: compared the carrying amount of the investment with the draft balance sheet of United Utilities North West Limited to identify whether the net assets, being an approximation of the minimum recoverable amount, is in excess of the carrying amount and if not, comparing it with the expected value of the business based on a suitable premium to the regulatory capital value.

Our results

 We found the Group's assessment of the recoverability of the investment in United Utilities PLC to be acceptable (2021: acceptable).

In the previous year the capitalisation of overheads was included in the Capitalisation of costs relating to the capital programme key audit matter. We continue to perform procedures over the capitalisation of overheads but we've excluded it from the key audit matter as the size of the balance is less significant than the judgement around the capitalisation of project costs.

to the members of United Utilities PLC

3. Our application of materiality and an overview of the scope of our audit

Materiality for the Group financial statements as a whole was set at £16.4m (2021: £19.0m), determined with reference to a benchmark of Group profit before tax of £317.9m, normalised to exclude this year's net fair value gains or losses on debt and derivative instruments as disclosed in note 6, of which it represents 5.2% (2021: 4.1%).

Materiality for the parent Company financial statements as a whole was set at £8.5m (2021: £9.0m), determined with reference to a benchmark of Company total assets, of which it represents 0.1% (2021: 0.1%).

In line with our audit methodology, our procedures on individual account balances and disclosures were performed to a lower threshold, performance materiality, so as to reduce to an acceptable level the risk that individually immaterial misstatements in individual account balances add up to a material amount across the financial statements as a whole.

Performance materiality was set at 75% (2021: 75%) of materiality for the financial statements as a whole, which equates to £12.3m (2021: £14.2m) for the Group and £6.4m (2021: £6.7m) for the parent Company. We applied this percentage in our determination of performance materiality because we did not identify any factors indicating an elevated level of risk.

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.5m (2021: £0.5m), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 33 (2021: 33) reporting components, we subjected 4 (2021: 4) to full scope audits for group purposes and 0 (2021: 1) to specified risk-focused audit procedures.

For the residual components, we performed analysis at an aggregated group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group team approved the component materialities, which ranged from £6.0m to £15.8m (2021: £8.0m to £17.5m), having regard to the mix of size and risk profile of the Group across the components. The work on all components, including the audit of the parent Company, was performed by the Group team

The scope of the audit work performed was predominately substantive as we placed limited reliance upon the Group's internal control over financial reporting.

4. Going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Group or the Company or to cease their operations, and as they have concluded that the Group's and the Company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

We used our knowledge of the Group, its industry, and the general economic environment to identify the inherent risks to its business model and analysed how those risks might affect the Group's and Company's financial resources or ability to continue operations over the going concern period. The risk that we considered most likely to adversely affect the Group's and Company's available financial resources and metrics related to the possible failure of the Haweswater water system resulting in a one-off totex impact.

to the members of United Utilities PLC

We considered whether these risks could plausibly affect the liquidity or covenant compliance in the going concern period by assessing the directors' sensitivities over the level of available financial resources and covenant thresholds indicated by the Group's financial forecasts taking account of severe, but plausible, adverse effects that could arise from these risks individually and collectively.

Our procedures included:

- Assessing key assumptions in the forecasts: critically assessing assumptions in base case and
 downside scenarios relevant to liquidity and covenant metrics such as inflation rate growth
 compared to market forecasts, forecast bonus payments compared to historical bonus payments
 and forecast dividend payments compared to Group dividend policy. This included assessing
 whether downside scenarios applied assumptions which are mutually consistent, using our
 assessment of the possible range of each key assumption and our knowledge of interdependencies;
- **Funding assessment:** considering the availability of existing debt arrangements and committed loan facilities, including testing compliance with covenants and expected maturity dates;
- Historical accuracy of managements forecasts: comparing historical budgets to actual results to assess the directors' track record of budgeting accurately;
- Evaluating directors' intent: evaluating the achievability of the actions the directors consider
 they would take to improve the position should the risks materialise, including assessment of
 mitigating actions within their control;
- Assessing the completeness and accuracy of the matters covered in the going concern
 disclosure: considering whether the going concern disclosure in the basis of preparation note to
 the financial statements gives a full and accurate description of the directors' assessment of
 going concern, including the identified risks and related sensitivities. We assessed the
 completeness of the going concern disclosure.

Our conclusions based on this work:

- we consider that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate;
- we have not identified, and concur with the directors' assessment that there is not, a material
 uncertainty related to events or conditions that, individually or collectively, may cast significant
 doubt on the Group's or Company's ability to continue as a going concern for the going concern
 period; and
- we found the going concern disclosure in the basis of preparation section of the Accounting Policies note to be acceptable.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the Group or the Company will continue in operation.

5. Fraud and breaches of laws and regulation – ability to detect

Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included:

to the members of United Utilities PLC

- enquiring of directors, the audit committee, internal audit and inspection of policy
 documentation relating to the ultimate parent, United Utilities Group PLC, as to the Group's high
 level policies and procedures to prevent and detect fraud, including the internal audit function,
 and the Group's channel for "whistleblowing", as well as whether they have knowledge of any
 actual, suspected or alleged fraud.
- reading Board and Audit Committee minutes relating to the ultimate parent, United Utilities
 Group PLC; and
- considering remuneration incentive schemes and performance targets for directors.

We communicated identified fraud risks throughout the audit team and remained alert to any indications of fraud throughout the audit.

As required by auditing standards, and taking into account possible pressures to meet profit targets and our overall knowledge of the control environment, we perform procedures to address the risk of management override of controls and the risk of fraudulent revenue recognition, the risk that Group management may be in a position to make inappropriate accounting entries, and the risk of bias in accounting estimates and judgements such as revenue recognition and provisions for household customer debt, capitalisation of costs relating to the capital programme and valuation of retirement benefit obligations.

Further detail in respect of the above accounting estimates and judgements is set out in the key audit matter disclosures in section 2 of this report.

We also performed procedures including:

- Identifying journal entries to test based on risk criteria and comparing the identified entries to supporting documentation. These included journals relating to revenue or treasury posted to unexpected or unrelated accounts.
- Assessing significant accounting estimates for bias.

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector experience, through discussion with the directors and other management (as required by auditing standards), from inspection of the Group's regulatory and legal correspondence and discussed with the directors and other management the policies and procedures regarding compliance with laws and regulations.

As the Group is regulated, our assessment of risks involved gaining an understanding of the control environment including the entity's procedures for complying with regulatory requirements.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit.

The potential effect of these laws and regulations on the financial statements varies considerably.

Firstly, the Group is subject to laws and regulations that directly affect the financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation, pension legislation and taxation legislation and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, the Group is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation. We identified the following areas as those most

to the members of United Utilities PLC

likely to have such an effect: Ofwat, Environment Agency, Drinking Water Inspectorate, health and safety, anti-bribery, employment law, regulatory capital and liquidity and certain aspects of company legislation recognising the financial and regulated nature of the Group's activities and its legal form. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the directors and inspection of regulatory and legal correspondence, if any. Therefore if a breach of operational regulations is not disclosed to us or evident from relevant correspondence, an audit will not detect that breach.

Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remained a higher risk of non-detection of fraud, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

6. We have nothing to report on the other information in the Annual Report

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Strategic report and directors' report

Based solely on our work on the other information:

- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

7. We have nothing to report on the other matters on which we are required to report by exception

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

- 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; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

to the members of United Utilities PLC

8. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 91, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and 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 they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

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 our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

The Company is required to include these financial statements in an annual financial report prepared using the single electronic reporting format specified in the TD ESEF Regulation. This auditor's report provides no assurance over whether the annual financial report has been prepared in accordance with that format.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

9. The purpose of our audit work and whom we owe our responsibilities

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.

Ian Griffiths (Senior Statutory Auditor)

for and on behalf of KPMG LLP, Statutory Auditor Chartered Accountants St Peter's Square, Manchester M2 3AE 28 June 2022

Consolidated income statement

for the years ended 31 March

	Note	2022 £m	2021 £m
Revenue	2	1,862.7	1,808.0
Staff costs Other operating costs	3 4	(184.3) (461.7)	(173.4) (420.3)
Allowance for expected credit losses – trade and other receivables Other income	4 4 4	(23.4) 4.4	(28.7)
Depreciation and amortisation expense Infrastructure renewals expenditure	4	(418.2) (169.5)	(422.3) (164.8)
Total operating expenses		(1,252.7)	(1,205.9)
Operating profit		610.0	602.1
Investment income Finance expense Allowance for expected credit losses – loans to joint ventures	5 6	40.3 (187.8) 0.1	49.2 (107.2) 3.7
Investment income and finance expense		(147.4)	(54.3)
Share of losses of joint ventures Profit on disposal of joint venture	11 11	(1.8)	(9.3) 36.7
Profit before tax		460.8	575.2
Current tax credit/(charge) Deferred tax charge	7 7	61.8 (562.5)	(83.9) (18.4)
Тах	7	(500.7)	(102.3)
(Loss)/profit after tax		(39.9)	472.9

All of the results shown above relate to continuing operations.

Consolidated statement of comprehensive income

for the years ended 31 March

Note	2022 £m	2021 £m
(Loss)/profit after tax	(39.9)	472.9
Other comprehensive income		
Items that may be reclassified to profit or loss in subsequent periods: Cash flow hedge effectiveness Tax on items recorded within other comprehensive income Foreign exchange adjustment Foreign exchange adjustments reclassified to profit on disposal of joint ventures	106.7 (26.8) -	9.3 (1.8) (1.6) 4.0
Other comprehensive income that may be reclassified to profit or loss	79.9	9.9
Items that will not be reclassified to profit or loss in subsequent periods: Remeasurement gains/(losses) on defined benefit pension schemes Change in credit assumptions for debt reported at fair value	313.6	(82.7)
through profit or loss Cost of hedging – cross-currency basis spread adjustment	(4.1)	(43.3) (12.7)
Deferred tax adjustments in respect of prior years on net fair value gains Tax on items recorded within other comprehensive income 7	(109.4)	36.6
Other comprehensive income that will not be reclassified to profit or loss	200.1	(102.1)
Total comprehensive income	240.1	380.7

Consolidated and company statement of financial position

for the years ended 31 March

			Group		Company (restated)*
		2022	2021	2022	2021
	Note	£m	£m	£m	£m
ASSETS					
Non-current assets					
Property, plant and equipment	9	12,147.5	11,799.0	2.5	2.8
Intangible assets	10	160.8	181.1	- 16 F	-
Interests in joint ventures Other investments	11 12	16.5 0.1	0.1	16.5 3,944.0	4,014.9
Inventories	12	0.1	0.1	3,344.0	4,014.9
Trade and other receivables	14	1,881.5	1,867.3	1,880.2	1,865.7
Retirement benefit surplus	18	1,016.8	689.0	245.6	158.0
Derivative financial instruments	A4	399.4	410.3	-	-
		15,623.0	14,946.8	6,088.8	6,041.4
Current assets					
Inventories	13	17.8	18.3	-	-
Trade and other receivables	14	232.1	236.6	760.8	1,398.4
Current tax asset	15	74.4	6.9 744.1	- 	- 0.1
Cash and short-term deposits Derivative financial instruments	15 A4	240.9 58.0	744.1 14.4	57.5	9.1
Derivative infancial instruments	A 4	623.2	1,020.3	818.3	1,407.5
Total costs					
Total assets		16,246.2	15,967.1	6,907.1	7,448.9
LIABILITIES Non current liabilities					
Non-current liabilities Trade and other payables	21	(835.2)	(798.3)	_	_
Borrowings	16	(7,746.0)	(7,797.0)	(379.7)	(290.4)
Deferred tax liabilities	19	(2,148.1)	(1,449.5)	(85.8)	(54.6)
Derivative financial instruments	A4	(136.7)	(107.8)	-	-
		(10,866.0)	(10,152.6)	(465.5)	(345.0)
Current liabilities					
Trade and other payables	21	(373.0)	(326.2)	(108.4)	(37.0)
Borrowings	16	(318.2)	(739.9)	(9.7)	(882.1)
Provisions	20	(13.5)	(11.1)	-	-
Derivative financial instruments	A4	(0.5)	(6.9)		(040.4)
Total liabilities		(705.2)	(1,084.1)	(118.1)	(919.1)
		(11,571.2)	(11,236.7)	(583.6)	(1,264.1)
Total net assets		4,675.0	4,730.4	6,323.5	6,184.8
EQUITY					
Capital and reserves attributable to e	quity holde	rs of the comp	any		
Share capital	23	881.8	881.8	881.8	881.8
Share premium account		1,430.0	1,430.0	1,430.0	1,430.0
Other reserves	22	86.5	6.6	-	-
Retained earnings		2,276.7	2,412.0	4,011.7	3,873.0
Shareholders' equity		4,675.0	4,730.4	6,323.5	6,184.8

^{*}The statement of financial position for the year ended 31 March 2021 has been restated to reflect a change in accounting policy regarding the treatment of joint ventures. In the previous financial year, joint ventures were accounted for at cost within the company. For the current reporting period, the company has applied the equity method in accounting for its joint venture arrangements as described in IAS 28. See note 11 for further details.

These financial statements for the group and United Utilities PLC (company number: 2366616) were approved by the board of directors and authorised for issue on 28 June 2022, and signed on its behalf by:

PA Aspin Chief Financial Officer

Consolidated statement of changes in equity

for the years ended 31 March

Group	Share capital £m	Share premium account £m	Other reserves* £m	Retained earnings £m	Total £m
At 1 April 2021	881.8	1,430.0	6.6	2,412.0	4,730.4
Loss after tax Other comprehensive income Remeasurement gains on defined	-	-	-	(39.9)	(39.9)
benefit pension schemes (see note 18) Change in credit assumption for debt reported	-	-	-	313.6	313.6
at fair value through profit or loss Cash flow hedge effectiveness Tax on items taken directly to	-	-	106.7	(4.1)	(4.1) 106.7
equity (see note 7)			(26.8)	(109.4)	(136.2)
Total comprehensive income	_		79.9	160.2	240.1
Dividends (see note 8)				(295.5)	(295.5)
At 31 March 2022	881.8	1,430.0	86.5	2,276.7	4,675.0
		Share			
	Share	premium	Other	Retained	
	capital £m	account £m	reserves* £m	earnings £m	Total £m
Group	LIII	LIII	LIII	LIII	LIII
At 1 April 2020	881.8	1,430.0	7.0	2,322.8	4,641.6
Profit after tax Other comprehensive income Remeasurement losses on defined	-	-	-	472.9	472.9
benefit pension schemes (see note 18) Change in credit assumption for debt reported	-	-	-	(82.7)	(82.7)
at fair value through profit or loss Cash flow hedge effectiveness	-	-	- 9.3	(43.3)	(43.3) 9.3
Cost of hedging – cross-currency basis spread	-	-	3.3	-	9.5
adjustment Tax on items taken directly to	-	-	(12.7)	-	(12.7)
equity (see note 7)	-	-	0.6	34.2	34.8
Foreign exchange adjustments Foreign exchange adjustments reclassified to profit on disposal of joint ventures	-	-	(1.6) 4.0	-	(1.6) 4.0
Total comprehensive income	_		(0.4)	381.1	380.7
Dividends (see note 8)				(291.9)	(291.9)
At 31 March 2021	881.8	1,430.0	6.6	2,412.0	4,730.4

^{*} Other reserves comprise the group's cumulative exchange reserve, cost of hedging reserve and cash flow hedging reserve. A reconciliation of movements in these reserves is included in note 22.

Company statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Retained earnings £m	Total £m
Company At 1 April 2020 (as reported previously) Restatement At 1 April 2020 (restated)*	881.8 881.8	1,430.0 1,430.0	4,172.3 (9.5) 4,162.8	6,484.1 (9.5) 6,474.6
Profit after tax (as reported previously)			30.2	30.2
Restatement			(14.2)	(14.2)
Profit after tax (restated)	-	-	16.0	16.0
Other comprehensive income Remeasurement losses on defined benefit pension schemes (see note 18) Tax on items taken directly to equity (see note 7)	- -	-	(20.5) 6.6	(20.5) 6.6
Total comprehensive income (as reported previously) Total comprehensive income (restated)*			16.3 2.1	16.3 2.1
Dividends (see note 8)	-	-	(291.9)	(291.9)
At 31 March 2021 (as reported previously) At 31 March 2021 (restated)*	881.8 881.8	1,430.0 1,430.0	3,896.7 3,873.0	6,208.5 6,184.8
			•	
		1,430.0	•	
			•	
	Share capital	Share premium account	Retained earnings	6,184.8 Total
At 31 March 2021 (restated)*	881.8 ——————————————————————————————————	Share premium	3,873.0 Retained	6,184.8
	Share capital	Share premium account	Retained earnings	6,184.8 Total
At 31 March 2021 (restated)* Company	Share capital	Share premium account £m	Retained earnings	Total
At 31 March 2021 (restated)* Company At 1 April 2021	Share capital	Share premium account £m	Retained earnings fm 3,873.0	6,184.8 Total fm 6,184.8
Company At 1 April 2021 Profit after tax Other comprehensive income	Share capital	Share premium account £m	Retained earnings fm 3,873.0	6,184.8 Total fm 6,184.8
Company At 1 April 2021 Profit after tax Other comprehensive income Remeasurement gains on defined benefit pension schemes (see note 18)	Share capital	Share premium account £m	Retained earnings fm 3,873.0 379.1	6,184.8 Total £m 6,184.8 379.1
Company At 1 April 2021 Profit after tax Other comprehensive income Remeasurement gains on defined benefit pension schemes (see note 18) Tax on items taken directly to equity (see note 7)	Share capital	Share premium account £m	3,873.0 Retained earnings fm 3,873.0 379.1 85.0 (29.9)	6,184.8 Total fm 6,184.8 379.1 85.0 (29.9)
Company At 1 April 2021 Profit after tax Other comprehensive income Remeasurement gains on defined benefit pension schemes (see note 18) Tax on items taken directly to equity (see note 7) Total comprehensive income	Share capital	Share premium account £m	3,873.0 Retained earnings fm 3,873.0 379.1 85.0 (29.9) 434.2	6,184.8 Total fm 6,184.8 379.1 85.0 (29.9) 434.2

^{*}The statement of changes in equity for the year ended 31 March 2021 has been restated to reflect a change in accounting policy regarding the treatment of joint ventures. In the previous financial year, joint ventures were accounted for at cost within the company. For the current reporting period, the company has applied the equity method in accounting for its joint venture arrangements as described in IAS 28. See pages 109-110 and note 11 for further details.

As permitted by section 408 of the Companies Act 2006, the company has not presented its own income statement. The results of the company for the financial year was a profit after tax of £379.1 million (2021: £30.2 million, as reported previously, which has been restated as £16.0 million).

Consolidated and company statement of cash flows

for the years ended 31 March

			Group		Company
		2022	2021	2022	2021
	Note	£m	£m	£m	£m
Operating activities					
Cash generated from operations	A1	1,036.6	1,004.6	467.2	318.5
Interest paid		(128.3)	(136.7)	(22.6)	(19.1)
Interest received and similar income		29.6	36.3	4.4	1.8
Tax paid		(8.9)	(81.6)	(7.7)	(70.5)
Tax received		-	26.9	15.6	65.3
Net cash generated from operating activity	ties	929.0	849.5	456.9	296.0
Investing activities					
Purchase of property, plant and equipmen	nt	(609.0)	(610.4)	-	-
Purchase of intangible assets		(19.5)	(33.6)	-	-
Grants and contributions received	21	1.8	5.0	-	-
(Extension)/repayment of loans to joint					
ventures	A6	(13.0)	(2.0)	(13.0)	-
Dividends received from joint ventures	12	-	6.4	-	-
Proceeds from disposal of investments	12	-	85.3	-	-
Net cash used in investing activities		(639.7)	(549.3)	(13.0)	-
Financing activities					
Proceeds from borrowings net of issuance	costs	173.0	912.8	-	-
Repayment of borrowings		(681.8)	(701.5)	(100.0)	(20.0)
Dividends paid to equity holders of the					
company	8	(295.5)	(291.9)	(295.5)	(291.9)
Net cash used in financing activities		(804.3)	(80.6)	(395.5)	(311.9)
Effects of exchange rate changes		1.5	-	-	-
Net increase/(decrease) in cash and cash					
equivalents		(513.5)	219.6	48.4	(15.9)
Cash and cash equivalents at beginning					
of the year		733.6	514.0	9.1	25.0
Cash and cash equivalents at end of the year	ear 15	220.1	733.6	57.5	9.1

The principal accounting policies adopted in the preparation of these financial statements are set out below. Further detail can be found in note A7.

Basis of preparation

The financial statements have been prepared in accordance with the requirements of the Companies Act 2006, and with UK-adopted international accounting standards. They have been prepared on the historical cost basis, except for the revaluation of financial instruments, accounting for the transfer of assets from customers, and the revaluation of infrastructure assets to fair value on transition to IFRS.

The preparation of financial statements, in conformity with IFRS, requires management to make estimates and assumptions that affect the amounts of assets and liabilities at the date of the financial statements and the amounts of revenues and expenses during the reporting periods presented. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results, ultimately, may differ from these estimates.

The financial statements have been prepared on the going concern basis as the directors have a reasonable expectation that the group has adequate resources for a period of at least 12 months from the date of the approval of the financial statements and that there are no material uncertainties to disclose.

In assessing the appropriateness of the going concern basis of accounting the directors have reviewed the resources available to the group in the form of cash and committed facilities as well as consideration of the group's capital adequacy, along with a baseline plan that incorporates latest views of the current economic climate, including high levels of inflation in the near term. The directors have considered the magnitude of potential impacts resulting from uncertain future events or changes in conditions, and the likely effectiveness of mitigating actions that the directors would consider undertaking. The baseline position has been subjected to a number of severe but reasonable downside scenarios in order to assess the group's ability to operate within the amounts and terms (including relevant covenants) of existing facilities. These scenarios consider: the potential impacts of increased totex costs, including a significant one-off totex impact arising in the assessment period; lower CPIH inflation; elevated levels of bad debt; outcome delivery incentive penalties; and the impact of these factors materialising on a combined basis. Mitigating actions were considered to include deferral of capital expenditure; a reduction in other discretionary totex spend; the close out of derivative asset balances; and the deferral or suspension of dividend payments.

Consequently, the directors are satisfied that the group will have sufficient funds to continue to meet its liabilities as they fall due for at least 12 months from the date of approval of the financial statements, and that the severe but reasonable downside scenarios indicate that the group will be able to operate within the amounts and terms (including relevant covenants) of existing facilities. The financial statements have therefore been prepared on a going concern basis.

Restatement of comparative information

The company's statement of financial position and statement of changes in equity for the year ended 31 March 2021 have been restated to reflect a voluntary change of accounting policies which has been applied in relation to the accounting for joint venture arrangements in the company's separate financial statements.

In the prior financial year, joint ventures were accounted for at cost within the company. After the execution of a conversion of debt to equity share capital in April 2021, the company concluded that accounting for its joint venture arrangements using the equity method as described in IAS 28 *Investments in Associates and Joint Ventures* will provide more relevant information that better reflects the risks and rewards associated with its joint ventures and is more aligned to how information on joint ventures is considered by management.

In accordance with the guidance for adopting voluntary changes in accounting policies contained within IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, the company has applied the change in policy retrospectively, resulting in the restatement of the relevant information pertaining to these joint ventures presented in respect of prior years in these financial statements.

The company had zero coupon loan notes payable by its principal joint venture, Water Plus, at a carrying value £9.5m within trade and other receivables on 1 April 2020. Adopting the equity method of accounting for joint ventures applies the company's share of losses incurred to this date against these loan notes, as they are deemed to represent part of the group's long-term interest in Water Plus. As such, an opening balance restatement has been applied to retained earnings in the company's statement of changes in equity for the prior year.

Further restatements of the information presented for the year-ended 31 March 2021 have been made in relation to the company's £8.9 million unrecognised share of Water Plus losses for the year ended 31 March 2021 and the £5.3 million unrecognised share of Water Plus losses for the year ended 31 March 2020, as described in note 11. As at the restated 31 March 2021 position, these losses have been applied against a fully drawn £32.5 million revolving credit facility receivable in United Utilities PLC as at 31 March 2021. This facility was held in trade and other receivables at a value of £32.5 million in the prior year reported company statement of financial position, but is deemed to be part of the company's long-term interest in Water Plus when applying the equity accounting method.

Compared with the financial statements reported for the year ended 31 March 2021, this has resulted in:

	Year ended 31 March 2021 Previously		
	Reported (£m)	Adjustment (£m)	Restated (£m)
Company			
Non-current Trade and other receivables	1,889.4	(23.7)	1,865.7
Retained earnings	(3,896.7)	23.7	(3,873.0)
	Balar Previously	nces as at 1 April 202	0
	Reported (£m)	Adjustment (£m)	Restated (£m)
Non-current Trade and other receivables	1,761.5	(9.5)	1,752.0
Retained earnings	(4,172.3)	9.5	(4,162.8)

Adoption of new and revised standards

There were no new standards, interpretations and amendments, effective for the year ended 31 March 2022, that were relevant to the group or would have a material impact on the group's financial statements, or that were not early adopted in previous years.

Early adopted new and revised standards

'Phase II' - IBOR reform

In January 2021, the Secretary of State for BEIS and the EU endorsed the IASB-published amendments to IFRS 9 'Financial Instruments', and IFRS 7 'Financial Instruments: Disclosures' in respect of interest rate benchmark reform, effective for annual periods beginning on or after 1 January 2021 with early adoption permitted

('Phase II' IBOR Reform). The group chose to early adopt the Phase II reforms for the year ended 31 March 2021, though this has had no impact on the financial statements for the year then ended.

The group also subscribed to the ISDA 2020 IBOR fallbacks protocol in the previous financial year, with these protocols embedding fallback provisions into the group's interest rate derivative contracts enabling a contractual replacement of LIBOR as a benchmark with SONIA. All of the group's derivative counterparties subscribed to the protocol and from 1 January 2022 the group's derivative portfolio transitioned from referencing LIBOR to referencing SONIA as the underlying floating interest rate.

As part of the transition, where applicable, the group has applied the relevant practical expedients from certain requirements in IFRS 9 and IFRS 7 relating to changes in the basis for determining contractual cash flows of financial assets, financial liabilities and hedge accounting.

On 31 December 2021, the group had a balance of £501.6 million loan instruments, along with an additional £800.0 million of undrawn committed facilities that transitioned away from referencing LIBOR as the floating benchmark rate.

Derivatives with a notional value of £5,166.0 million also transitioned on this date, with this figure being inclusive of £2,117.8 million notional value of derivatives designated within fair value hedge relationships. Immaterial hedge effectiveness was recorded in the group's income statement through the transition as a result of maintaining economic equivalence within the fair value hedge relationships.

Detail on the derivation of this net balance can be found in note A4, along with further information on the group's transition to alternative benchmarks.

Critical accounting judgements and key sources of estimation uncertainty

In the process of applying its accounting policies set out in note A7, the group is required to make certain estimates, judgements and assumptions that it believes are reasonable based on the information available. These judgements, estimates and assumptions affect the carrying amounts of assets and liabilities at the date of the financial statements and the amounts of revenues and expenses recognised during the reporting periods presented. Changes to these estimates, judgements and assumptions could have a material effect on the financial statements.

On an ongoing basis, the group evaluates its estimates using historical experience, consultation with experts and other methods considered reasonable in the particular circumstances. As estimates carry with them an inherent level of uncertainty, the group performs sensitivity analysis where this is practicable and where, in management's opinion, it provides useful and meaningful information. This sensitivity analysis is performed to understand a range of outcomes that could be considered reasonably possible based on experience and the facts and circumstances associated with individual areas of the financial statements that are subject to estimates. Actual results may differ significantly from the estimates, the effect of which is recognised in the period in which the facts that give rise to the revision become known.

As part of the evaluation of critical accounting judgements and key sources of estimation uncertainty, the group has considered the implications of climate change on its operations and activities, further details of which are set out below.

The following paragraphs detail the estimates and judgements the group believes to have the most significant impact on the annual results under IFRS, including specific considerations in light of the COVID-19 pandemic.

Revenue recognition and allowance for doubtful receivables

Accounting estimate – The group recognises revenue generally at the time of delivery and when collection of the resulting receivable has been deemed probable. In estimating the amount of revenue to recognise, where the group considers that the criteria for revenue recognition are not met for a transaction, revenue recognition is delayed until such time as collectability is deemed probable. There are two different criteria whereby management does not recognise revenue for amounts which have been billed to those customers on the basis that collectability is not probable. These are as follows:

- The customer has not paid their bills for a period of at least two years; and
- The customer has paid their bills in the preceding two years, but has previously had bills derecognised and has more than their current year debt outstanding.

This two-criteria approach resulted in a £26.6 million reduction in revenue compared with what would have been recognised had no adjustment been made for amounts where collectability is not probable. Had management made an alternative judgement that where customers have paid in the preceding two years, and have more than their current year debt outstanding, the recoverability of the entirety of their debt was deemed to be probable (i.e. the second criteria were disapplied), the required adjustment to revenue would have been £12.4 million lower.

Accounting estimate – At each reporting date, the company and each of its subsidiaries evaluate the estimated recoverability of trade receivables and record allowances for expected credit losses based on experience. Estimates associated with these allowances are based on, among other things, a consideration of actual collection history. The actual level of receivables collected may differ from the estimated levels of recovery, which could impact operating results positively or negatively. At 31 March 2022, an allowance for expected credit losses relating to household customer debt of £78.3 million was supported by a six-year cash collection projection. Based on a five-year or seven-year cash collection projection the allowance for doubtful receivables would have increased by £1.1 million or reduced by £0.5 million respectively.

Since early 2020, the group's expected credit loss assessment in respect of trade receivables has been significantly impacted by the economic uncertainty brought about as a result of the COVID-19 pandemic. Whilst economic uncertainty linked to the COVID-19 pandemic has receded somewhat during the year ended 31 March 2022, with households and businesses adjusting to a new post-pandemic norm, a high level of economic uncertainty remains due largely to increases in the cost of living during the year and that are forecast to continue in the near future. This could have a significant impact on many of the group's customers that could in turn affect the ability of some customers to pay their bills.

In recognition of this ongoing future uncertainty, the basis on which the allowance for expected credit losses covering the group's household customer base is assessed has been updated during the year. Whereas in the prior year the allowance for expected credit losses was determined based on the assumption that cash collection experienced over the last two years continues into the future, this would no longer be expected to give a reasonable view of cash collection risk. This is because cash collection for the year has performed strongly and therefore may overstate future cash collection forecasts when considering the current economic climate, while cash collection for the year ended 31 March 2021 was impacted by the COVID-19 pandemic and resulted in much lower levels of cash collection than might be expected on an ongoing basis.

In light of this, a longer run four-year average of cash collection has been modelled and is deemed to give a more realistic forecast for future collection taking into account all of the above factors, including expected increases in the cost of living. This assumption supports the reported household bad debt charge of 1.8 per cent of household revenue. Had future cash collection been assessed based on the average cash collection during the current year only, the bad debt charge would have been 1.6 per cent of household revenue resulting in a reduction in the charge of £2.7 million, with similar results based on using average cash collection from the last two or last three years. If average cash collection from the prior year only was used the bad debt charge would have been 2.0 per cent of household revenue resulting in an increase in the charge of £3.4 million. Consideration of this range of reasonably possible scenarios indicates that, based on current levels of economic uncertainty, the allowance for expected credit losses is within a reasonable range, and that a longer run four year average results in a balanced position in light of current levels of uncertainty.

Accounting estimate – United Utilities Water Limited raises bills in accordance with its entitlement to receive revenue in line with the limits established by the periodic regulatory price review processes. For household water and wastewater customers with water meters, the receivable billed is dependent on the volume supplied, including the sales value of an estimate of the units supplied between the dates of the last water meter reading and the billing date. Meters are read on a cyclical basis and the group recognises revenue for unbilled amounts based on estimated usage from the last billing through to each reporting date. The estimated

usage is based on historical data, judgement and assumptions; actual results could differ from these estimates, which would result in operating revenues being adjusted in the period that the revision to the estimates is determined.

Revenue recognised for unbilled amounts for these customers at 31 March 2022 was £145.8 million. Had actual consumption been 5 per cent higher or lower than the estimate of units supplied, this would have resulted in revenue recognised for unbilled amounts being £5.0 million higher or lower respectively. For customers who do not have a meter, the receivable billed and revenue recognised is dependent on the rateable value of the property as assessed by an independent rating officer.

Property, plant and equipment

Accounting judgement - the group recognises property, plant and equipment (PPE) on its water and wastewater infrastructure assets where such expenditure enhances or increases the capacity of the network, whereas any expenditure classed as maintenance is expensed in the period it is incurred. Determining enhancement from maintenance expenditure requires an accounting judgement, particularly when projects have both elements within them. Enhancement spend was 57 per cent of total spend in relation to infrastructure assets during the year. A change of +/- one per cent would have resulted in £3.9 million less/more expenditure being charged to the income statement during the period. In addition, management capitalises time and resources incurred by the group's support functions on capital programmes, which requires accounting judgements to be made in relation to the appropriate capitalisation rates. Support costs allocated to PPE represent 40 per cent of total support costs. A change in allocation of +/- 5 per cent would have resulted in £2.3 million less/more expenditure being charged to the income statement during the period.

Accounting estimate - the estimated useful economic lives of PPE and intangible assets is based on management's experience. When management identifies that actual useful economic lives differ materially from the estimates used to calculate depreciation, that charge is adjusted prospectively. Due to the significance of PPE and intangibles investment to the group, variations between actual and estimated useful economic lives could impact operating results both positively and negatively. As such this is a key source of estimation uncertainty. The depreciation and amortisation expense for the year was £418.2 million. A 10 per cent increase in average asset lives would have resulted in a £41.6 million increase in this figure.

Retirement benefits

Accounting estimate - the group operates two defined benefit schemes which are independent of the group's finances. Actuarial valuations of the schemes are carried out as determined by the trustees at intervals of not more than three years. Profit before tax and net assets are affected by the actuarial assumptions used. The key assumptions include: discount rates, pay growth, mortality and increases to pensions in payment and deferred pensions. It should be noted that actual rates may differ from the assumptions used due to changing market and economic conditions and longer or shorter lives of participants and, as such, this represents a key source of estimation uncertainty. Sensitivities in respect of the assumptions used during the year are disclosed in note A5.

Accounting estimate - Included within the group's defined benefit pension scheme assets are assets with a fair value estimated to be £271.7 million that are categorised as 'level 3' assets within the IFRS 13 'Fair value measurement' hierarchy, meaning that the value of the assets is not observable at 31 March 2022. Estimates of the fair value of these assets with respect to the group and company have been performed by the investment managers' valuation specialists using the latest available statements of each of the funds that make up the total level 3 asset balance, updated for any subsequent cash movements between the statement date and the year-end reporting date. As at 31 March 2022, the group had an IAS 19 net pension surplus of £771 million and the group has de-risked its pension schemes through hedging strategies applied to the underlying interest rate and future inflation. Given the significant degree of investment headroom and low ongoing risk presented by the group's defined benefit pension schemes, uncertainty around the recoverability of the schemes' investments is low.

Derivative financial instruments

Accounting estimate - the model used to fair value the group's derivative financial instruments requires management to estimate future cash flows based on applicable interest rate curves. Projected cash flows are then discounted back using discount factors which are derived from the applicable interest rate curves adjusted for management's estimate of counterparty and own credit risk, where appropriate. Sensitivities relating to derivative financial instruments are included in note A4.

Climate change

The group is continually developing its assessment of the impact that climate change has on the assets and liabilities recognised and presented in its financial statements.

The natural environment within which the group operates is constantly changing, and this influences how its water and wastewater services are to be delivered in the future. In addition, the group has embedded ambitious climate-related targets within its own operations, with this affecting the portfolio of assets required to deliver such services.

The impact of climate change has been considered in the preparation of these financial statements across a number of areas, predominantly in respect of the valuation of the property, plant and equipment held by the group.

Asset life reviews are undertaken regularly for facilities impacted by climate change, environmental legislation or the group's decarbonisation measures. This can result in the acceleration of depreciation of assets that are deemed to be commercially obsolete or for which no further use is planned, in part as a result of the group's decarbonisation strategy. In recent years this has resulted in material accelerations in respect of bioresources facilities impacted by changes in environmental legislative requirements. No further material accelerations were required in the current financial year, however this is subject to continuous assessment.

The group is exposed to potential asset write-downs following flooding resulting from extreme weather events, the frequency of which are expected to increase as the effects of climate change become more apparent. Following large-scale flooding, items are identified that have been damaged beyond repair and require immediate accounting write-downs. No such charges were required in the current financial year.

In addition to the risks posed by an increased likelihood of large-scale flooding events in future years, climate change also presents challenges relating to prolonged periods of hot and dry weather, the frequency of which is expected to increase. This could potentially impact the viability of certain types of assets in future years such as those associated with the intake of water from the natural environment, or require a strategic reconfiguration of assets to respond to such challenges. It is expected that if any such impact were to materialise this would be over a longer period of time rather than within a single financial year, and no financial impact has been identified in the current year.

In recent years the group has sought to further enhance the accuracy of its useful life assessments through the introduction of more forward-looking information in asset life reviews. This includes the use of disposal data to identify trends that may inform the group's view of useful lives into the future. This information is used alongside other decommissioning data and data from strategic asset planning systems to inform useful asset lives. The group mitigates the exposure that the carrying value of its book asset base has to climate-related risks through strategic planning activities that incorporate defined climate scenarios, climate change mitigation pledges, and long-term climate projections. The group installs permanent flood defences and other resilience measures at the most vulnerable facilities to protect its assets.

1. Segmental reporting

The board is provided with information on a single segment basis for the purposes of assessing performance and allocating resources and as such, the group has a single segment for financial reporting purposes and therefore no further detailed segmental information is provided in this note.

2. Revenue

The group's revenue arises from the provision of services within the United Kingdom.

2022 £m	2021 £m
776.5	751.0
946.3	941.5
68.9	64.1
71.0	51.4
1,862.7	1,808.0
	fm 776.5 946.3 68.9 71.0

In accordance with IFRS 15, revenue has been disaggregated based on what is recognised in relation to the core services of supplying clean water and the removal and treatment of wastewater. Each of these services is deemed to give rise to a distinct performance obligation under the contract with customers, though following the same pattern of transfer to the customer who simultaneously receives and consumes both of these services over time.

Wholesale water and wastewater charges relate to services provided to household customers and non-household retailers. Household retail charges relate solely to the margin applied to the wholesale amounts charged to residential customers. These wholesale charges and the applicable retail margin are combined in arriving at the total revenues relating to water and wastewater services provided to household customers. No margin is applied to wholesale water and wastewater services provided to non-household retailers.

Other revenues comprise a number of smaller non-core income streams including those relating to energy generation and export, and those associated with activities, typically performed opposite property developers, which impact the group's capital network assets including diversions works to relocate water and wastewater assets, and activities that facilitate the creation of an authorised connection through which properties can obtain water and wastewater services.

3. Directors and employees

Directors' remuneration

	2022	2021
	£m	£m
Salaries	1.6	1.4
Benefits	0.3	0.3
Bonus	0.9	0.8
Share-based payment charge	1.9	1.7
	4.7	4.2

Included within the above are aggregate emoluments of £2.2 million (2021: £2.4 million) in respect of the highest paid director.

3. Directors and employees (continued)

No directors accrued benefits under defined benefit schemes during the current year (2021: no directors). Three directors opted for a cash allowance in lieu of their company pension scheme entitlement (2021: four directors).

Five directors (2021: six directors) received shares in United Utilities Group PLC in respect of qualifying services. Five directors (2021: six directors) had long-term incentive plans which vested during the year. Aggregate amounts receivable relating to long-term incentive plans of £1.9 million (2021: £2.0 million) were recognised during the year. Details of the employee Sharebuy scheme and the executive share scheme operated by United Utilities Group PLC are given in the UUG 2022 Annual report and financial statements.

Remuneration of key management personnel

	2022 £m	2021 £m
Salaries and short-term employee benefits Share-based payment charge	6.8 2.7	6.6 3.0
	9.5	9.6

Key management personnel comprises all directors and certain senior managers who are members of the executive team.

Staff costs (including directors)

	2022	2021
Group	£m	£m
Wages and salaries ⁽¹⁾⁽²⁾	302.9	275.0
Employee related taxes and levies	28.2	25.2
Severance	0.4	1.3
Post-employment benefits:		
Defined benefit pension expense (see note 18)	9.6	8.5
Defined contribution pension expense (see note 18)	26.1	23.4
	367.2	333.4
Charged to other areas including regulatory capital schemes	(182.9)	(160.0)
Staff costs	184.3	173.4

Notes:

Within employee benefits expense there were £0.4 million (2021: £1.9 million) of restructuring costs.

Conditional share awards in relation to shares of the ultimate parent undertaking, United Utilities Group PLC, have been granted to employees of the group under various schemes. Details of the terms and conditions of each scheme are given in the 2022 UUG 2022 Annual Report and financial statements. Included within wages and salaries is an expense of £4.8 million (2021: £3.6 million) relating to a recharge of share-based payment costs from the ultimate parent undertaking.

⁽¹⁾ Wages and salaries excluding non-permanent staff was £260.3 million (2021: £240.4 million).

⁽²⁾ In order to give a clearer view of the group's total staff costs, wages and salaries and amounts charged to other areas including regulatory capital schemes now include the costs of non-permanent staff who have worked for the group, whose costs were previously included within hired and contracted services presented within other operating costs. Accordingly, these amounts for the year ended 31 March 2021 have been re-presented to show information on a consistent basis, which has resulted in an increase in staff costs and a reduction in the costs of hired and contracted services of £11.6 million compared with what was presented in the financial statements published for that year.

3. Directors and employees (continued)

Average number of employees during the year (full-time equivalent including directors)

	2022	2021
Group	number	number
Average number of employees during the year	5,728	5,354

Company

The average number of employees during the year was 170 (2021: 196). These employees were engaged in the provision of services to United Utilities Water Limited, and as such employee costs of £15.9 million (2021: £17.8 million) in relation to these employees have been incurred directly by that company during the year. Operating profit

4. Operating profit

The following items have been charged/(credited) to the income statement in arriving at the group's operating profit:

	2022	2021
	£m	£m
Other operating costs		
Hired and contracted services (1)	95.4	84.7
Property rates	90.5	89.4
Power	99.6	83.6
Materials	90.8	82.2
Regulatory fees	28.4	28.0
Insurance	16.9	13.1
Loss on disposal of property, plant and equipment	3.9	10.7
Accrued innovation costs	5.9	6.2
Cost of properties disposed	3.0	2.6
Other expenses	27.3	19.8
	461.7	420.3
Allowance for expected credit losses – trade and other receivables		
Allowance for expected credit losses – trade and other receivables (see note 1	4) 23.4	28.7
	23.4	28.7
Other income		
Other income	(4.4)	(3.6)
	(4.4)	(3.6)
Depreciation and amortisation expense		
Depreciation of property, plant and equipment (see note 9)	377.0	379.8
Amortisation of intangible assets (see note 10)	41.2	42.5
	418.2	422.3
•		

4. Operating profit (continued)

Note:

(1) As explained in note 3, costs associated with non-permanent staff that were previously included within hired and contracted services are now included within staff costs. Accordingly, the prior year non-permanent staff costs included within hired and contracted services presented within other operating costs in the prior year have also been re-presented. This resulted in an increase in staff costs and a reduction in the costs of hired and contracted services of £11.6 million compared with what was presented in the financial statements published for that year.

During the year ended 31 March 2022, the group experienced inflationary pressures across much of its operating cost base. This was most notable in relation to power costs, which increased by £16.0 million compared with the prior year, largely due to price increases. Through its progressive hedging policy the group was able to lock in the commodity price on the majority of its consumption for the year ended 31 March 2022 before the most recent energy price rises, and therefore secured an average rate over the year of £78 per MWh. This compares favourably with the market rate of over £200 per MWh as at the year end reporting date and has been fundamental to the group's ability to minimise the impact of price rises on its cost base.

Incremental costs totalling £5.8 million have been incurred during the year in relation to the implementation of Software as a Service (SaaS) arrangements, which are increasingly expected to be recognised within operating costs in accordance with clarifications on the appropriate accounting treatment issued by the IFRS Interpretations Committee (IFRIC) during the year. The majority of SaaS implementation costs in previous years have been accounted for as intangible asset additions. These prior year amounts have not been restated to reflect the group's updated approach as they are not material.

Research and development expenditure for the year ended 31 March 2022 was £1.2 million (2021: £1.0 million). In addition, £5.9 million (2021: £6.2 million) of costs have been accrued by United Utilities Water Limited in relation to the Innovation in Water Challenge scheme operated by Ofwat for AMP7. These expenses directly offset amounts recognised in revenue during each year intended to fund innovation projects across England and Wales as part of an industry-wide scheme to promote innovation in the sector. The amounts accrued will either be spent on innovation projects that the group successfully bids for or will be transferred to other successful water companies in accordance with the scheme rules.

Other income relates primarily to property rental income.

During the year, the group obtained the following services from its auditor:

	2022 £000	2021 £000
Audit services:	1000	1000
Statutory audit - group and company	169	152
Statutory audit - subsidiaries	506	456
as the state of th	675	608
Non-audit services:		
Regulatory audit services provided by the statutory auditor	64	71
Other non-audit services	116	60
	855	739

5. Investment income

	2022	2021
	£m	£m
Interest receivable on short term book denosits held at amorticed cost	2.2	2.0
Interest receivable on short-term bank deposits held at amortised cost	2.2) 2.8	3.8 3.7
Interest receivable on loan to joint ventures held at amortised cost (see note A6 Net pension interest income (see note 18)	, 2.6 14.3	3.7 17.5
Interest receivable from ultimate parent undertaking (see note A6)	21.0	24.2
interest receivable from diffinate parent undertaking (see note Ao)		
	40.3	49.2
6. Finance expense		
o. Finance expense	2022	2021
	2022 fm	2021 £m
Interest payable	LIII	LIII
Interest payable on borrowings held at amortised cost ⁽¹⁾	330.7	181.7
	330.7	181.7
Fair value losses/(gains) on debt and derivative instruments		
Fair value hedge relationships:		
Borrowings ⁽²⁾	(199.4)	(155.1)
Designated swaps ^{(2) (3)}	194.0	132.8
	(5.4)	/22.2)
	(5.4)	(22.3)
Financial instruments at fair value through profit or loss:		
Borrowings designated at fair value through profit or loss ⁽⁴⁾	(7.9)	(67.3)
Associated swaps ^{(5) (6)}	9.7	67.8
	1.8	
	1.8	0.5
Fixed interest rate swaps ⁽⁵⁾	(139.7)	(36.0)
Net receipts on swaps and debt under fair value option	(31.5)	(17.6)
Inflation swaps ⁽⁵⁾	29.7	3.4
·		_
Other	2.2	(2.5)
	(139.3)	(52.7)
Net fair value (gains)/ losses on debt and derivative instruments ⁽⁶⁾	(142.9)	(74.5)
	187.8	107.2
:		
Notes		

Notes:

⁽¹⁾ Includes a £227.9 million (2021: £52.6 million) non-cash inflation uplift expense repayable on maturity in relation to the group's index-linked debt and £1.6 million (2021: £1.8 million) interest expense on lease liabilities, representing the unwinding of the discounting applied to future lease payments.

⁽²⁾ Includes foreign exchange losses of £4.3 million (2021: £43.9 million gains). These gains/losses are largely offset by fair value losses/gains on derivatives.

⁽³⁾ Under the provisions of IFRS 9 'Financial Instruments', a £1.8 million gain (2021: £12.7 million loss) resulting from changes to the foreign currency basis spread are recognised in other comprehensive income rather than profit or loss as they relate to items designated in an accounting hedge relationship.

⁽⁴⁾ Under the provisions of IFRS 9 'Financial Instruments', a nil gain or loss (2021: £43.3 million loss) due to changes in the group's own credit risk is recognised in other comprehensive income rather than within profit or loss.

⁽⁵⁾ These swap contracts are not designated within an IFRS 9 hedge relationship and are classed as 'held for trading' under the accounting standard.

These derivatives form economic hedges and, as such, management intends to hold these through to maturity.

⁽⁶⁾ Includes £33.2 million income (2021: £21.5 million) due to net interest on derivatives and debt under fair value option and £28.3 million expense (2021: £1.3 million expense) due to non-cash inflation uplift on index-linked derivatives.

6. Finance expense (continued)

Interest payable is stated net of £52.7 million (2021: £30.4 million) borrowing costs capitalised in the cost of qualifying assets, within property, plant and equipment and intangible assets during the year. This has been calculated by applying an average capitalisation rate of 4.2 per cent (2021: 2.3 per cent) to expenditure on such assets as prescribed by IAS 23 'Borrowing Costs'.

7. Tax

	2022	2021
	£m	£m
Current tax		
UK corporation tax	10.7	84.5
Adjustments in respect of prior years	(72.5)	(0.6)
Total current tax (credit)/charge for the year	(61.8)	83.9
Deferred tax		
Current year	92.9	20.2
Adjustments in respect of prior years	66.9	(1.8)
	159.8	18.4
Change in tax rate	402.7	
Total deferred tax charge for the year	562.5	18.4
Total tax charge for the year	500.7	102.3

The deferred tax charge of £402.7 million (2021: nil) reflects the Government's planned increase in the rate of corporation tax from 19 per cent to 25 per cent from 1 April 2023.

The adjustments in respect of prior years mainly relate to optimising the available research and development UK tax allowances on our innovation related expenditure, for multiple prior years.

The table below reconciles the notional tax charge at the UK corporation tax rate to the total tax charge and total effective tax rate for the year:

2022	2022	2021	2021
£m	%	£m	%
460.8		575.2	
87.6	19.0	109.3	19.0
22.3	4.8		
(5.6)	(1.2)	(2.4)	(0.4)
402.7	87.4	-	-
(6.3)	(1.4)	(4.6)	(0.8)
500.7	108.6	102.3	17.8
	460.8 87.6 22.3 (5.6) 402.7 (6.3)	£m % 460.8 87.6 19.0 22.3 4.8 (5.6) (1.2) 402.7 87.4 (6.3) (1.4)	fm % fm 460.8 575.2 87.6 19.0 109.3 22.3 4.8 (5.6) (1.2) (2.4) 402.7 87.4 (6.3) (1.4) (4.6)

The deferred tax rate adjustment reflects the fact that the current year deferred tax charge is at the future tax rate of 25 per cent, rather than the 19 per cent current year rate.

7. Tax (continued)

The table below reconciles the notional tax charge at the UK corporation tax rate to the total current tax charge for the year:

	2022	2021
	£m	£m
Profit before tax	460.8	575.2
Profit before tax multiplied by the standard rate of UK corporation		
tax of 19%	87.6	109.3
Relief for capital allowances in place of depreciation	(108.0)	(78.6)
Disallowance of depreciation charged in the accounts	68.8	70.0
Financial transactions timing differences	(26.9)	(7.8)
Pension timing differences	(3.9)	-
Relief for capitalised interest	(10.0)	(5.8)
Other timing differences	2.0	2.0
Adjustments to tax charge in respect of prior years	(72.5)	(0.6)
Joint venture net losses	0.3	1.8
Profit on disposal of joint venture	-	(7.0)
(Income not taxable)/expenses not deductible for tax purposes	(9.1)	(1.7)
Depreciation charged on non-qualifying assets	2.5	2.3
Current year tax losses carry forward	7.4	-
Current tax charge for the year	(61.8)	83.9

The group's current tax charge is typically lower than the UK headline rate of 19 per cent, primarily due to a range of adjustments which are simply timing differences between recognition of the income or expense in the accounts and in the related tax computations submitted to HMRC. These include deductions in relation to capital spend, pension timing differences, unrealised profits or losses in relation to financing and related treasury derivatives and capitalised interest.

The current year net timing differences in relation to capital spend, i.e. capital allowances less depreciation, was higher than the prior year mainly due to the temporary super-deductions introduced in 2021.

The adjustments to tax charge in respect of prior years of £72.5 million mainly relates to optimising the available research and development UK tax allowances on our innovation-related expenditure, for multiple prior years. The year-on-year movement in financial transactions timing differences is sensitive to fair value movements on treasury derivatives and can therefore fluctuate significantly from year to year.

The current year pension timing differences was higher than the prior year mainly due to the required accounting reallocation to equity of £3.3 million in the prior year, due to there being a prior year actuarial loss.

The relief for capitalised interest relates to amounts which are immediately deductible under the UK tax rules notwithstanding the amounts being capitalised for accounting purposes. The year-on-year amount will depend on the amount capitalised.

Other timing differences includes a range of small value items where there is a timing difference between the accounting and tax recognition.

7. Tax (continued)

The decrease in joint venture losses is due to a reduction in our share of the losses in relation to Water Plus.

The increase in income not taxable is mainly due to the additional 30 per cent element of the temporary capital allowances superdeductions introduced in 2021.

Depreciation charged on non-qualifying assets relates to accounting depreciation where there is no corresponding tax deduction. Where permitted under HMRC rules, any available UK tax losses will be carried forward and utilised in future periods, when the tax rate is at 25 per cent.

Tax on items taken directly to e	eauity
----------------------------------	--------

rax on items taken directly to equity	2022	2021
Group	£m	£m
Current tax		
Relating to other pension movements	-	(3.3)
Deferred tax (see note 19)		
On remeasurement (losses)/gains on defined benefit pension schemes	111.1	(26.0)
Relating to other pension movements	-	3.3
Adjustments in respect of prior years on net fair value gains	-	-
On net fair value (losses)/gains on credit assumptions for debt reported		
at fair value through profit and loss and cost of hedging	26.1	(8.8)
Share-based payments	(1.0)	-
Total tax charge on items taken directly to equity	136.2	(34.8)
	2022	2021
Company	£m	£m
Current tax		
Relating to other pension movements	-	(0.7)
Deferred tax (see note 19)		
On remeasurement gains/(losses) on defined benefit pension schemes	29.9	(6.6)
Relating to other pension movements	<u>-</u>	0.7
Total tax (credit)/charge on items taken directly to equity	29.9	(6.6)

The tax adjustments taken to other comprehensive income primarily relate to remeasurement movements on the group's defined benefit pension schemes. Management considers that the most likely method of realisation would be through a refund, which would be taxed at the rate applicable to refunds from a trust (currently 35 per cent).

8. Dividends

Amounts recognised as distributions to equity holders of the company in the year comprise:

	2022 £m	2021 £m
Ordinary shares	LIII	LIII
Final dividend for the year ended 31 March 2021 at 28.83 pence per		
share (2020: 28.40 pence)	196.6	193.6
Interim dividend for the year ended 31 March 2022 at 14.50 pence per		
share (2021: 14.41 pence)	98.9	98.3
	295.5	291.9

9. Property, plant and equipment

Property, plant and equipment comprises owned and leased assets.

					2022 £m	2021 £m
Property, plant and equ Right of use assets – lea		ned			12,087.7 59.8	11,739.7 59.3
Net book value				-	12,147.5	11,799.0
Property, plant and equ	uipment –owr	ned				
Group	Land and buildings £m	Infra- structure assets £m	Operational assets £m	Fixtures, fittings, tools and equipment £m	Assets in course of construction £m	Total £m
Cost At 1 April 2020 Additions Transfers Disposals	353.9 1.7 9.7 (1.6)	5,730.5 100.8 66.5	7,686.8 136.7 418.3 (167.1)	559.0 8.4 (3.9) (47.6)	1,550.8 430.3 (492.6)	15,881.0 677.9 (2.0) (216.3)
At 31 March 2021 Additions Transfers Disposals	363.7 2.5 6.4 (0.3)	5,897.8 84.8 48.8 (0.1)	8,074.7 181.2 241.9 (136.1)	515.9 7.6 4.7 (14.5)	1,488.5 452.4 (300.9) (0.1)	16,340.6 728.5 0.9 (151.1)
At 31 March 2022	372.3	6,031.3	8,361.7	513.7	1,639.9	16,918.9
Accumulated depreciat At 1 April 2020 Charge for the year Transfers Disposals	122.2 8.2 - (1.5)	434.5 42.6 -	3,450.2 299.1 - (155.7)	420.5 28.8 (1.0) (47.0)	- - - -	4,427.4 378.7 (1.0) (204.2)
At 31 March 2021 Charge for the year Transfers Disposals	128.9 8.4 (0.2)	477.1 45.0 0.2	3,593.6 294.7 (0.1) (130.1)	401.3 26.5 (14.1)	-	4,600.9 374.6 0.1 (144.4)
At 31 March 2022	137.1	522.3	3,758.1	413.7	-	4,831.2
Net book value At 31 March 2021	234.8	5,420.7	4,481.1	114.6	1,488.5	11,739.7
At 31 March 2022	235.2	5,509.0	4,603.6	100.0	1,639.9	12,087.7

During the year, there was a transfer of £0.9 million cost from intangible assets to property, plant and equipment following a data cleanse exercise in respect of the fixed assets register. The overall impact of these reclassifications on the purchase of property, plant and equipment and intangible assets in the statement of cash flows is nil.

9. Property, plant and equipment (continued)

Property, plant and equipment - leased

			Fixtures, fittings,	
	Land and	Operational	tools and	
C	buildings	assets	equipment	Total
Group	£m	£m	£m	£m
Cost				
At 1 April 2020	52.8	6.5	-	59.3
Additions	2.4	1.5	0.2	4.1
Disposals	(0.1)	(0.2)		(0.3)
At 31 March 2021	55.1	7.8	0.2	63.1
Additions	2.1	0.7	-	2.8
Disposals	(0.3)	(1.4)	-	(1.7)
At 31 March 2022	56.9	7.1	0.2	64.2
Accumulated depreciation				
At 1 April 2020	1.0	1.0	-	2.0
Charge for the year	1.2	0.9	-	2.1
Disposals	(0.1)	(0.2)		(0.3)
At 31 March 2021	2.1	1.7	-	3.8
Charge for the year	1.5	0.9	-	2.4
Disposals	(0.4)	(1.4)	-	(1.8)
At 31 March 2022	3.2	1.2	-	4.4
Net book value				
At 31 March 2021	53.0	6.1	0.2	59.3
At 31 March 2022	53.7	5.9	0.2	59.8

In order to carry out its activities, the group enters into leases of assets from time to time, typically in relation to items such as land, buildings and vehicles. Due to the nature of the group's operations, many of the group's leases have extremely long terms, ranging from one year to 999 years. The group does not typically lease assets on a short-term basis or enter into leases for low value asset and therefore no material costs were incurred during the year, either individually or in aggregate, in relation to lease contracts with a duration of less than 12 months or for low-value assets.

At 31 March 2022, the group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to £280.8 million (2021: £335.8 million).

In addition to these commitments, the group has long-term expenditure plans which include investments to achieve improvements in performance required by regulators and to provide for future growth.

Company

At 1 April 2019 the company recognised property, plant and equipment at a cost of £3.2 million as an opening balance adjustment on adoption of IFRS 16 'Leases'. This adjustment was in respect of leased land and buildings. Depreciation of £0.3 million was charged during the year ended 31 March 2022 (2021: £0.2 million), resulting in a net book value of £2.5 million at 31 March 2021 (2021: £2.8 million).

The company had no contractual commitments for the acquisition of property, plant and equipment at 31 March 2022 or 31 March 2021.

10. Intangible assets

Group	Total £m
Cost	
At 1 April 2020	441.4
Additions	32.7
Disposals Transfers	(51.0) 2.0
Transfers	
At 31 March 2021	425.1
Additions	20.1
Disposals	(13.2)
Transfers	0.9
At 31 March 2022	432.9
Accumulated amortisation	
At 1 April 2020	252.4
Charge for the year	41.5
Disposals	(50.9)
Transfers	1.0
At 31 March 2021	244.0
Charge for the year	41.2
Disposals	(13.1)
Transfers	-
At 31 March 2022	272.1
Net book value at 31 March 2021	181.1
Net book value at 31 March 2022	160.8

The group's intangible assets relate mainly to computer software.

At 31 March 2022, the group had entered into contractual commitments for the acquisition of intangible assets amounting to £1.8 million (2021: £0.9 million).

Company

The company had no intangible assets or contractual commitments for the acquisition of intangible assets at 31 March 2022 or 31 March 2021.

11. Investment in joint ventures

Group	Total £m
At 1 April 2020 Share of profit/(losses) of joint ventures Less: share of losses allocated to other components of long-term interest in joint ventures Dividends received from joint ventures Currency translation differences Disposal of joint venture	46.8 (9.3) 14.2 (6.4) (1.6) (43.7)
At 31 March 2021 Additions (1) Share of losses of joint ventures Less: share of losses allocated to other components of long-term interest in joint ventures Dividends received from joint ventures Currency translation differences Disposal of joint venture	18.3 (1.8) - - -
At 31 March 2022	16.5

⁽¹⁾ Additions of £18.3 million comprise a £32.5 million subscription in the equity share capital of Water Plus during the year, net of £14.2 million of the group's share of joint venture losses recognised in prior years that were allocated against its long-term interest in Water Plus previously recognised within amounts owed by related parties.

Following the disposal of the group's overseas investment in AS Tallinna Vesi (Tallinn Water) in March 2021, the group's interests in joint ventures mainly comprises its 50 per cent interest in Water Plus Group Limited (Water Plus), which is jointly owned and controlled by the group and Severn Trent PLC under a joint venture agreement.

The group's total share of Water Plus losses for the year was £1.8 million (2021: £8.9 million share of losses), all of which has been recognised in the income statement. As reported in the group's annual report for the year ended 31 March 2021, at that date a fully drawn £32.5 million revolving credit facility extended to Water Plus by United Utilities PLC, which was presented within amounts owed by related parties included within trade and other receivables, was considered to form part of the group's long-term interest in the Water Plus joint venture as there was a clear expectation that it would be converted to additional equity share capital. As such, the group's £14.2 million share of losses recognised in the income statement for the year then ended (comprising the group's share of Water Plus losses for the year of £8.9 million and £5.3 million of the group's previously unrecognised share of losses relating to prior years) was allocated against this fully drawn facility, resulting in a net reported balance of £18.3 million at 31 March 2021, which was included in amounts owed by related parties.

The conversion of this facility to equity share capital was executed on 23 April 2021 and therefore the brought forward balance of £18.3 million has been included as an addition to the group's joint ventures balance during the period.

Company

In the parent company separate financial statements, the company has elected to apply the equity method of accounting for joint ventures as described in IAS 28.

A voluntary change in accounting policy has been applied in the year such that joint venture investments are accounted for using the equity method rather than at cost less provision for impairment. See pages 109-110 for further details of the financial effects of this change in policy and a summary of the restatements made to the comparatives presented within these financial statements.

11. Investment in joint ventures (continued)

	£m
At 1 April 2020 and 31 March 2021 (as stated previously) At 31 March 2021 (restated)	-
Additions ⁽¹⁾	18.3
Share of losses of joint ventures	(1.8)
At 31 March 2022	16.5

⁽¹⁾ Additions of £18.3 million comprise a £32.5 million subscription in the equity share capital of Water Plus during the year, net of £14.2 million of the group's share of joint venture losses recognised in prior years that were allocated against its long-term interest in Water Plus previously recognised within amounts owed by related parties.

12. Other investments

Group	£m
At 1 April 2020 Change in fair value	0.1
At 31 March 2021 Change in fair value	0.1
At 31 March 2022	0.1

Company	Shares in subsidiary undertakings £m
At 1 April 2020 and 31 March 2021 Impairment	4,014.9 (70.9)
Net book value at 31 March 2022	3,944.0

During the year, an impairment of £70.9 million was recognised in relation to the company's investment in United Utilities (Tallinn) B.V., following the disposal of the group's overseas investment in AS Tallinna Vesi (Tallinn Water) in March 2021 and subsequent distribution of disposal proceeds from United Utilities (Tallinn) B.V. to United Utilities PLC in April 2021.

13. Inventories

	2022	2021
Group	£m	£m
Properties held for resale	1.6	2.5
Other inventories	16.6	15.8
	18.2	18.3

Included within other inventories are £0.4 million (2021: nil) of assets that are held for sale in the ordinary course of business, but where sales are not expected to occur within 12 months of the reporting date. These items are therefore classified within non-current assets in the statement of financial position.

Company

The company had no inventories at 31 March 2022 or 31 March 2021.

14. Trade and other receivables

	2022	Group 2021	2022	Company 2021 (restated)*
	£m	£m	£m	£m
Trade receivables	61.7	63.5	1.2	1 200 0
Amounts owed by subsidiary undertakings Amounts owed by ultimate parent	-	-	750.1	1,390.9
undertaking (see note A6) Amounts owed by other related	1,809.4	1,788.0	1,809.4	1,788.0
parties (see note A6)	116.4	113.8	80.3	85.2
Other debtors and prepayments	37.5	34.3	-	-
Accrued income	88.6	104.3	-	-
	2,113.6	2,103.9	2,641.0	3,264.1

At 31 March 2022 the group had £1,881.5 million (2021: £1,867.3 million) and the company had £1,880.2 million (2021: £1,889.4 million, as reported previously, which has been restated as £1,865.7 million) of trade and other receivables classified as non-current. These included £1,799.9 million (2021: £1,780.6 million) relating to a loan owed by the ultimate parent, whose repayment date falls not less than 366 days after the date of a repayment request, with the remaining £80.3 million relating to amounts owed by other related parties, further details of which can be found in note A6.

Amounts owed by subsidiary undertakings, all of which are expected to be settled within 12 months, represents the sum of all subsidiary balances where the total of intercompany tax, debt, interest and trade balances is in a net receivable position. The recoverability of these balances has been assessed at the year end, and, except for the allowance for doubtful receivables detailed below, the balances are deemed fully recoverable.

The carrying amount of trade and other receivables approximates to their fair value at 31 March 2022 and 31 March 2021.

Trade receivables do not carry interest and are stated net of allowances for doubtful receivables, an analysis of which is as follows:

	2022	2021
Group	£m	£m
At the start of the year	80.4	71.4
Amounts charged to operating expenses (see note 4)	23.4	28.7
Trade receivables written off	(19.2)	(20.2)
Amounts charged to deferred income	-	0.5
At the end of the year	84.6	80.4

Amounts charged to deferred income relate to amounts invoiced for which revenue has not yet been recognised in the income statement.

At each reporting date, the group evaluates the recoverability of trade receivables and records allowances for expected credit losses which are measured in a way that reflects an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes and considers past events, current conditions and forecasts of future conditions.

At 31 March 2022 and 31 March 2021, the group had no trade receivables that were past due and not individually impaired.

14. Trade and other receivables (continued)

In the company, gross amounts owed by subsidiary undertakings relating to non-trading subsidiary undertakings are stated net of allowances for doubtful receivables, an analysis of which is as follows:

Company	2022 £m	2021 £m
At the start of the year	98.1	97.4
Amounts charged to operating expenses	-	0.7
Utilisation of provision	(93.3)	_
At the end of the year	4.8	98.1

At each reporting date, the company evaluates the recoverability of amounts owed by subsidiary undertakings and records allowances for doubtful receivables based on an assessment of the company's ability to pay.

The following table provides information regarding the ageing of trade receivables that were past due and individually impaired:

		Aged		
	Aged	between	Aged	
Group	less than	one year and	greater than	Carrying
	one year	two years	two years	value
At 31 March 2022	£m	£m	£m	£m
Gross trade receivables	68.7	26.1	51.4	146.2
Allowance for expected credit losses	(20.3)	(13.1)	(51.2)	(84.6)
Net trade receivables	48.4	13.0	0.2	61.6
		Aged		
	Aged	between	Aged	
	less than	one year and	greater than	Carrying
	one year	two years	two years	value
At 31 March 2021	£m	£m	£m	£m
Gross trade receivables	61.9	35.3	44.4	141.7
Allowance for expected credit losses	(19.9)	(16.5)	(43.9)	(80.4)
Net trade receivables	42.0	18.8	0.5	61.3

At 31 March 2022, the group had £0.1 million (2021: £2.2 million) of trade receivables that were not past due.

The majority of accrued income balances represent contract assets arising from timing differences between the billing cycle and the usage of water by customers. They therefore typically reverse in subsequent months, with all amounts held in relation to these contract assets at the beginning of the reporting period having subsequently reversed into the income statement during the year. At 31 March 2022 and 31 March 2021, the group had no accrued income that was past due. In instances where the collection of consideration is not considered probable at the point services are delivered, no accrued income balance is recognised, as the criteria to recognise revenue in accordance with IFRS 15 has not been met.

Company

At 31 March 2022 and 31 March 2021, the company had no trade receivables that were past due.

15. Cash and cash equivalents

•		Group		Company
	2022 £m	2021 £m	2022 £m	2021 £m
Cash at bank and in hand	9.9	88.9	0.1	0.1
Short-term bank deposits	231.0	655.2	57.4	9.0
Cash and short-term deposits	240.9	744.1	57.5	9.1
Book overdrafts (included in borrowings, see note 16)	(20.8)	(10.5)		(0.1)
Cash and cash equivalents in the statement of cash flows	220.1	733.6	57.5	9.0

Cash and short-term deposits include cash at bank and in hand, deposits, and other short-term highly liquid investments which are readily convertible into known amounts of cash and have a maturity of three months or less. The carrying amounts of cash and cash equivalents approximate their fair value.

Book overdrafts, which result from cash management practices, represent the value of cheques issued and payments initiated that had not cleared as at the reporting date.

16. Borrowings

	2022	2021
Group	£m	£m
Non-current liabilities		
Bonds	6,168.4	6,029.9
Bank and other term borrowings	1,445.0	1,710.4
Lease liabilities	57.6	56.7
Amounts owed to ultimate parent undertaking	75.0	
	7,746.0	7,797.0
Current liabilities	·	
Bonds	-	388.5
Bank and other term borrowings	284.7	252.5
Book overdrafts (see note 15)	20.8	10.5
Lease liabilities	3.3	3.3
Amounts owed to ultimate parent undertaking	9.4	85.1
	318.2	739.9
	8,064.2	8,536.9

For further details of the principal economic terms and conditions of outstanding borrowings see note A3.

	2022	2021
Company	£m	£m
Non-current liabilities		
Bonds	302.4	287.9
Amounts owed to ultimate parent undertaking	75.0	-
Lease liabilities	2.3	2.5
	379.7	290.4

16. Borrowings (continued)

Company (continued) £m	£m
Current liabilities	
Bank and other term borrowings -	100.0
Book overdrafts (see note 15)	0.1
Lease liabilities 0.3	0.3
Amounts owed to subsidiary undertakings -	696.6
Amounts owed to ultimate parent undertaking 9.4	85.1
9.7	882.1
389.41,	172.5

Borrowings are unsecured and are measured at amortised cost. The carrying amounts of borrowings approximate their fair value.

During the year an exercise was performed to reassess the nature of the intercompany payable balances owed by the company to United Utilities Group PLC. As a result, both parties executed an agreement to split the existing intercompany payable balance owed to United Utilities Group PLC, which had been classified as a current liability in prior years, into an intercompany loan of £75.0 million that is repayable at 31 March 2027 with the remaining amount continuing to form part of the intercompany cash pooling arrangements presented within current liabilities.

17. Leases

As part of its activities, the group typically leases items such as land, buildings and vehicles. The group does not typically lease assets on a short-term basis or enter into leases for low value assets and therefore no material costs were incurred during the year, either individually or in aggregate, in relation to lease contracts with a duration of less than 12 months or for low value assets.

Lease terms range from one year to 999 years. Due to the nature of the group's operations, many of the group's leases have extremely long terms.

The maturity profile of lease liabilities recognised at the balance sheet date is:

		Group		Company
	2022	2021	2022	2021
		£m	£m	£m£m
Laga than 1 was n	2.2	2.2	0.2	0.2
Less than 1 year	3.3	3.3	0.3	0.3
1 to 5 years	10.4	10.5	1.1	1.1
5 to 10 years	8.1	7.8	1.1	1.4
10 to 25 years	25.5	25.5	0.3	0.3
25 to 50 years	42.0	41.0	-	-
50 to 100 years	81.5	81.0	-	-
100 to 500 years	106.9	107.6	-	-
Longer than 500 years	3.2	3.2	-	-
Total undiscounted cash payments	280.9	279.9	2.8	3.1
Effect of discounting	(220.0)	(219.9)	(0.2)	(0.3)
Present value of cash payments	60.9	60.0	2.6	2.8

During the year ending 31 March 2022, £1.6 million of interest expense on lease liabilities was recognised (2021: £1.8 million) by the group, representing the unwinding of the discounting applied to future lease payments (see note 6).

17. Leases (continued)

The total cash outflow for leases for the year ended 31 March 2022 was £3.7 million for the group (2021: £3.5 million), of which £1.6 million was payment of interest (2021: £1.8 million) and £2.1 million payment of principal (2021: £1.7 million).

Payment of interest forms part of cash flows from operating activities and payment of principal is included within repayment of borrowings, which forms part of cash flows from financing activities in the group's statement of cash flows.

18. Retirement benefits

The group participates in two major funded defined benefit pension schemes in the United Kingdom – the United Utilities Pension Scheme (UUPS) and the United Utilities PLC group of the Electricity Supply Pension Scheme (ESPS) – as well as a defined contribution scheme which is part of the UUPS, and a series of historic unfunded, unregistered retirement benefit schemes operated for the benefit of certain former employees.

Both defined benefit schemes are closed to new employees, and since 1 April 2018 the majority of active members in the defined benefit section of the UUPS have been part of a hybrid section comprising both defined benefit and defined contribution elements in order to reduce the overall costs and risk to the group resulting from increases in future service costs, while balancing the interests of employees by maintaining an element of defined benefit pension provision.

Information about the pension arrangements for executive directors is contained in the directors' remuneration report.

Defined benefit schemes

As similar financial and demographic assumptions are used in accounting for both of the group's defined benefit pension schemes, and given they have similar risk profiles, the information below and further detail provided in note A5 is presented on an aggregated basis unless otherwise stated.

The net pension income before tax recognised in the income statement in respect of the defined benefit pension schemes is summarised as follows:

		Group	Com	pany
	2022	2021	2022	2021
	£m	£m	£m	£m
Current service cost	7.5	4.9	0.4	0.3
Curtailments/settlements	-	0.6	-	0.2
Administrative expenses	2.1	3.0	1.0	1.0
Pension expense charged to operating profit	9.6	8.5	1.4	1.5
Net pension interest income credited to investment income (see note 5)	(14.3)	(17.5)	(3.2)	(4.1)
Net pension income credited to the income statement before tax	(4.7)	(9.0)	(1.8)	(2.6)

Defined benefit pension costs excluding curtailments/settlements included within employee benefit expense were £9.6 million (2021: £7.9 million) for the group and £1.4 million (2021: £1.3 million) for the company comprising current service costs and administrative expenses.

18. Retirement benefits (continued)

Total post-employment benefits expense excluding curtailments/settlements charged to operating profit of £35.7 million (2021: £31.3 million) for the group and £1.4 million (2021: £1.3 million) for the company comprise the defined benefit costs described above of £9.6 million (2021: £7.9 million) for the group and £1.4 million (2021: £1.3 million) for the company and defined contribution costs of £26.1 million (2021: £23.4 million) for the group and £1il (2021: £nil) for the company (see note 3).

Included within curtailments/settlements in the prior year is £0.5 million for the group and £0.2 million (2021: £nil) for the company relating to the equalisation of GMP benefits (see note A5 for further details).

The reconciliation of the opening and closing net pension surplus included in the statement of financial position is as follows:

	Group	Comp	any
2022	2021	2022	2021
£m	£m	£m	£m
689.0	754.1	158.0	175.0
4.7	9.0	1.8	2.6
9.5	8.6	0.8	0.9
313.6	(82.7)	85.0	(20.5)
1,016.8	689.0	245.6	158.0
	£m 689.0 4.7 9.5 313.6	2022 2021 fm fm 689.0 754.1 4.7 9.0 9.5 8.6 313.6 (82.7)	2022 2021 2022 fm fm fm fm 689.0 754.1 158.0 4.7 9.0 1.8 9.5 8.6 0.8 313.6 (82.7) 85.0

Included in the contributions paid of £9.5 million (2021: £8.6 million) and company contributions paid of £0.8 million (2021: £0.9 million), which are included as cash outflows in arriving at net cash generated from operations in the consolidated statement of cash flows, enhancements to benefits provided on redundancy of £0.5 million (2021: £0.9 million) for the group and for the company of £0.2 million (2021: £0.3 million), payments in relation to historic unfunded, unregistered retirement benefit schemes of £2.5 million (2021: £0.7 million) for the group and £nil (2021: £nil) for the company, and administration expenses of £0.4 million (2021: £0.4 million) for the group and for the company of £0.2 million (2021: £0.2 million). Contributions in relation to current service cost remained broadly stable at £6.1 million (2021: £6.6 million) for the group and £0.4 million (2021: £0.4 million) for the company.

Remeasurement gains and losses are recognised directly in the statement of comprehensive income.

		Group		Company
	2022	2021	2022	2021
	£m	£m	£m	£m
The return on plan assets, excluding				
amounts included in interest	102.2	241.0	23.7	55.6
Actuarial gains/(losses) arising from changes in				
financial assumptions	164.0	(429.7)	41.4	(106.2)
Actuarial gains/(losses) arising from changes in				
demographic assumptions	52.4	80.6	13.2	20.1
Actuarial (losses)/gains arising from experience	(5.0)	25.4	6.7	10.0
Remeasurement gains/(losses) on				
defined benefit pension schemes	313.6	(82.7)	85.0	(20.5)

Deferred tax on the movement in the defined benefit surplus during the year has been recognised at a rate of 35 per cent, being the rate applicable to refunds from a trust, reflecting the most likely method by which the defined benefit surplus would be realised (see notes 7 and 19).

For more information in relation to the group's defined benefit pension schemes, including changes in financial and demographic assumptions, see note A5.

18. Retirement benefits (continued)

Defined contribution schemes

During the year, the group made £26.1 million (2021: £23.4 million) of contributions and the company made £nil (2020: £nil) of contributions to defined contribution schemes which are included in employee benefits expense in the consolidated income statement (see note 3), and as cash outflows in arriving at net cash generated from operating activities in the consolidated statement of cash flows.

19. Deferred tax liabilities

The following are the major deferred tax liabilities and assets recognised by the group and company, and the movements thereon, during the current and prior year:

Group depreciation function obligations function Other function Total function At 1 April 2020 1,217.4 263.9 (18.7) 1,462.6 Charges to the income statement (see note 7) 9.2 - 9.2 18.4 Charged to equity (see note 7) - (22.7) (8.8) (31.5) At 31 March 2021 1,226.6 241.2 (18.3) 1,449.5 Charges to the income statement (see note 7) 149.3 3.5 6.9 159.7 Change in tax rate 414.7 - (12.0) 402.7 Charged to equity (see note 7) - 111.1 25.1 136.2			Retirement		
Group £m £m £m £m At 1 April 2020 1,217.4 263.9 (18.7) 1,462.6 Charges to the income statement (see note 7) 9.2 - 9.2 18.4 Charged to equity (see note 7) - (22.7) (8.8) (31.5) At 31 March 2021 1,226.6 241.2 (18.3) 1,449.5 Charges to the income statement (see note 7) 149.3 3.5 6.9 159.7 Change in tax rate 414.7 - (12.0) 402.7 Charged to equity (see note 7) - 111.1 25.1 136.2		tax depreciation	benefit obligations	Other	Total
Charges to the income statement (see note 7) 9.2 - 9.2 18.4 Charged to equity (see note 7) - (22.7) (8.8) (31.5) At 31 March 2021 1,226.6 241.2 (18.3) 1,449.5 Charges to the income statement (see note 7) 149.3 3.5 6.9 159.7 Change in tax rate 414.7 - (12.0) 402.7 Charged to equity (see note 7) - 111.1 25.1 136.2	Group	•	_		
Charged to equity (see note 7) - (22.7) (8.8) (31.5) At 31 March 2021 1,226.6 241.2 (18.3) 1,449.5 Charges to the income statement (see note 7) 149.3 3.5 6.9 159.7 Change in tax rate 414.7 - (12.0) 402.7 Charged to equity (see note 7) - 111.1 25.1 136.2	Charges to the income statement	•	263.9	` ,	1,462.6
Charges to the income statement (see note 7) 149.3 3.5 6.9 159.7 Change in tax rate 414.7 - (12.0) 402.7 Charged to equity (see note 7) - 111.1 25.1 136.2		9.2	(22.7)		18.4
At 31 March 2022 1,790.6 355.8 1.7 2,148.1	Charges to the income statement (see note 7) Change in tax rate	149.3	3.5	6.9 (12.0)	1,449.5 159.7 402.7 136.2
	At 31 March 2022	1,790.6	355.8	1.7	2,148.1
Accelerated Retirement tax benefit depreciation obligations Other Total Company £m £m £m £m	Company	tax depreciation	benefit obligations		Total £m
Company	Company	LIII	LIII	LIII	LIII
Charged to the income statement 0.4 0.4	Charged to the income statement	(0.1)	-		60.1 0.4 (5.9)
Charged to the income statement - 0.7 0.8 1.5 Change in tax rate - 0.2 (0.2)	Charged to the income statement Change in tax rate	(0.1)	0.7	0.8	54.6 1.5 (0.2) 29.9
At 31 March 2022 (0.1) 85.9 - 85.8	At 31 March 2022	(0.1)	85.9	-	85.8

Certain deferred tax assets and liabilities have been offset in accordance with IAS 12 'Income Taxes'.

The £562.5 million deferred tax charge includes £402.7 million (2020: nil) reflecting the Government's planned increase in the rate of corporation tax from 19 per cent to 25 per cent from 1 April 2023.

The accelerated tax depreciation represents the difference between capital allowances and accounting depreciation on the group's property, plant and equipment. Capital allowances are tax reliefs provided in law and spread the tax relief due over a pre-determined standard number of years. This contrasts with the accounting treatment, where the expenditure is treated as an asset with the cost being depreciated over the useful life of the asset, or impaired if the value of such assets is considered to have reduced materially.

19. Deferred tax liabilities (continued)

Due to the group's continued significant annual capital expenditure, the deductions for capital allowances are expected to exceed depreciation for the medium term and continue to impact future corporation tax payments.

Given the fully funded nature of the group's defined benefit pension schemes, the retirement benefit obligations primarily relates to deferred taxation on the pensions schemes surplus position. This amount is significantly impacted by financial market conditions and long-term inflation expectations and therefore it is difficult to forecast future movements. However, these movements have no impact on medium-term future corporation tax payments as they only impact year-on-year deferred tax movement.

Deferred tax on retirement benefit obligations can arise where there are year-on-year differences between the contributions paid and the associated amounts charged to the profit and loss account. However, given the fully funded nature of our pension schemes, any such deferred tax movements, together with the associated impact on future corporation tax payments, is not expected to be significant for the medium term.

The other net short-term temporary differences of £1.7 million includes £35 million relating to tax losses which have been carried forward, where permitted under HMRC rules, to be utilised in future periods when the tax rate is at 25 per cent. Also included are other short-term timing differences in relation to the year-on-year movement in financial transactions which are sensitive to fair value movement on treasury derivatives and can therefore fluctuate significantly from year to year. However, these fair value movements have no impact on future corporation tax payments as they only impact the year-on-year deferred tax movement.

20. Provisions

Group	Severance	Other	Total
	£m	£m	£m
At 1 April 2020	4.9	11.5	16.4
Charged/(credited) to the income statement	1.3	(0.9)	0.4
Utilised in the year	(4.6)	(1.1)	(5.7)
At 31 March 2021	1.6	9.5	11.1
Charged/(credited) to the income statement	0.3	4.7	5.0
Utilised in the year	(0.7)	(1.9)	(2.6)
At 31 March 2022	1.2	12.3	13.5

The group had no provisions classed as non-current at 31 March 2022 or 31 March 2021.

The severance provision as at 31 March 2022 and 31 March 2021 relates to severance costs as a result of group reorganisation.

Other provisions principally relate to contractual, legal and environmental claims against the group and represent management's best estimate of the value of settlement, the timing of which is dependent on the resolution of the relevant legal claims.

Company

The company had no provisions at 31 March 2022 or 31 March 2021.

21. Trade and other payables

	2022	Group 2021	2022	Company 2021
	£m	£m	£m	£m
Non-current				
Deferred grants and contributions	818.2	780.4	-	-
Other creditors	17.0	17.9	-	-
	835.2	798.3		
	655.2	7 7 0 . 3		
		Group		Company
	2022	2021	2022	2021
	£m	£m	£m	£m
Current				
Trade payables	28.3	33.3	0.3	-
Amounts owed to ultimate parent undertaking	10.7	6.8	8.6	4.6
Amounts owed to subsidiary undertakings	-	-	81.7	25.4
Amounts owed to other related parties	-	2.4	-	1.1
Other tax and social security	6.6	5.9	-	-
Deferred grants and contributions	16.0	15.4	-	-
Accruals and other creditors	263.3	217.9	17.8	5.9
Deferred income	48.1	44.6	-	-
	373.0	326.2	108.4	41.6

The average credit period taken for trade purchases for the group is 13 days (2021: 13 days) and for the company is nil days (2021: nil days).

The carrying amounts of trade and other payables approximate their fair value at 31 March 2022 and 31 March 2021.

The majority of deferred income balances represent contract liabilities arising from timing differences between customer payments, the billing cycle, and the usage of water by customers. They therefore typically reverse in subsequent months, with all amounts held in relation to these contract liabilities at the beginning of the reporting period having subsequently reversed into the income statement during the year.

Deferred grants and contributions

	2022	2021
Craus	£m	£m
Group		
At the start of the year	795.8	751.3
Amounts capitalised during the year	1.8	5.0
Transfers of assets from customers	52.4	55.0
Credited to income statement – revenue	(15.4)	(14.6)
Credited to the income statement – other operating costs	(0.4)	(0.4)
Credited to allowance for bad and doubtful receivables	-	(0.5)
At the end of the year	834.2	795.8

22. Other reserves

ZZ. Other reserves				
	Cumulative	Cost of	Cash flow	
	exchange	hedging	hegding	
	reserve	reserve	reserve	Total
	£m	£m	£m	£m
At 1 April 2021	-	0.4	6.2	6.6
Other comprehensive income				
Change in fair value recognised in				
other comprehensive income	_	_	106.7	106.7
Amounts reclassified from other comprehensive inc	ome			
to profit or loss	-	_	(26.8)	(26.8)
Tax on items taken directly to equity	_	_	(20.0)	(20.0)
Foreign exchange adjustments	_	_	_	_
Foreign exchange adjustments Foreign exchange adjustments reclassified to profit	- -			
disposal of joint ventures	OH			
disposal of Joint Ventures	-	-	-	-
At 31 March 2022		0.4	86.1	86.5
	Cumulative	Cost of	Cash flow	
	exchange	hedging	hegding	
	reserve	reserve	reserve	Total
	£m	£m	£m	£m
At 1 April 2020	(2.4)	10.7	(1.3)	7.0
Other comprehensive income	(2.4)	10.7	(1.5)	7.0
Change in fair value recognised in				
other comprehensive income		(12.7)	9.3	(3.4)
·	-	2.4		(3.4)
Tax on items taken directly to equity	- (4.6)	2.4	(1.8)	
Foreign exchange adjustments	(1.6)	-	-	(1.6)
Foreign exchange adjustments reclassified to profit				
disposal of joint ventures	4.0	-	-	4.0
At 31 March 2021	<u> </u>	0.4	6.2	6.6

The group recognises the cost of hedging reserve as a component of equity. This reserve reflects accumulated fair value movements on cross-currency swaps resulting from changes in the foreign currency basis spread, which represents a liquidity charge inherent in foreign exchange contracts for exchanging currencies and is excluded from the designation of cross-currency swaps as hedging instruments.

The group designates a number of swaps hedging non-financial risks in cash flow hedge relationships in order to give a more representative view of operating costs. Fair value movements relating to the effective part of these swaps are recognised in other comprehensive income and accumulated in the cash flow hedging reserve.

Company

The company had no other reserves at 31 March 2022, or 31 March 2021.

23. Share capital

·	2022 number	2022 £	2021 number	2021 £
Group and Company Issued, called up and fully paid				
Ordinary shares of 100.0 pence each	881,787,478	881,787,478	881,787,478	881,787,478
Deferred A shares of 100.0 pence each	1	1	1	1
	881,787,479	881,787,479	881,787,479	881,787,479

The company has one class of ordinary shares which carry no right to fixed income. The deferred A share carries no voting rights nor a right to fixed income.

24. Contingent liabilities

At 31 March 2022, there were commitments for future capital expenditure and infrastructure renewals expenditure contracted but not provided for of £292.8 million (2021: £336.7 million).

Since 2016, the group has received indications from a number of property search companies (PSCs) that they intend to claim compensation for amounts paid in respect of CON29DW water and drainage search reports, which they allege should have been provided to them either free of charge or for a nominal fee in accordance with the Environmental Information Regulations. In April 2020, a group of over 100 PSCs, comprising companies within the groups that had previously issued notice of intended claims, served proceedings on all of the water and sewerage undertakers in England and Wales, including United Utilities Water Limited, for an unspecified amount of compensation. This is an industry-wide issue, and while the litigation has progressed during the year it remains in its early stages. The litigation's likely direction and the quantum of any compensation being claimed is uncertain at this stage; however, based on the information currently available, the likelihood of the claim's success is considered to be low, and any potential outflow is not expected to be material.

The group has credit support guarantees as well as general performance commitments and potential liabilities under contract that may give rise to financial outflow. The group has determined that the possibility of any outflow arising in respect of these potential liabilities is remote and, as such, there are no contingent liabilities to be disclosed in this regard (2021: none).

The company has not entered into performance guarantees as at 31 March 2022 or 31 March 2021.

25. Events after the reporting period

In March 2022, the process to market the group's renewable energy business, United Utilities Renewable Energy Limited (UURE), for sale commenced having been approved by the group's board of directors earlier in the year. As at the 31 March 2022 reporting date, the criteria for presenting the assets and liabilities of the UURE disposal group as held for sale in accordance with IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations' had not yet been met as the active programme to locate a buyer and complete the planned sale was only subsequently initiated in May 2022. The assets that are subject to the sales process primarily comprise property, plant and equipment with a carrying value of £64.6 million in the group's consolidated statement of financial position as at 31 March 2022.

In addition to this, in April 2022 the group issued a £100 million term loan facility to Export Development Canada due April 2030, and entered into a further two undrawn committed borrowing facilities with a total amount available of £50 million.

26. Ultimate parent undertaking

The company's immediate and ultimate parent undertaking and controlling party is United Utilities Group PLC, a company incorporated and registered in England and Wales.

The smallest group in which the results of the company are consolidated is that headed by United Utilities PLC.

The largest group in which the results of the company are consolidated is that headed by United Utilities Group PLC. The consolidated accounts of this group are available to the public and may be obtained from: The Company Secretary, United Utilities Group PLC, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP.

A1. Cash generated from operations

φ	Gr	oup		Company
	2022	2021	2022	2021
	£m	£m	£m	£m
Profit before tax	460.8	575.2	380.5	35.2
Adjustment for investment income	400.0	373.2	300.3	33.2
and finance expense (see notes 5, 6 and A6)	147.4	54.3	(36.0)	(35.8)
Adjustment for share of losses of joint ventures (see note 11)	1.8	9.3	-	(33.0)
Adjustment for profit on disposal of joint ventures		(36.7)	_	_
Adjustment for non-cash impairment write-down	-	-	70.9	-
Operating profit	610.0	602.1	415.4	(0.6)
Adjustments for:				
Depreciation of property, plant and equipment (see note 9)	377.0	379.8	0.3	0.2
Amortisation of intangible assets (see note 10)	41.2	42.5	-	-
Loss on disposal of property, plant and equipment				
(see note 4)	3.9	10.7	-	-
Amortisation of deferred grants and contributions				
(see note 21)	(15.8)	(15.0)	-	-
Impairment of investments (see note 12)	-	-	-	-
Changes in working capital:				
Increase in inventories (see note 13)	0.1	(1.7)	-	-
(Increase)/decrease in trade and other receivables	(6.7)	(9.8)	758.7	144.3
Increase/(decrease) in trade and other payables	24.4	1.4	(707.8)	174.0
Decrease in provisions (see note 20)	2.4	(5.3)	-	-
Pension contributions paid less pension expense				
charged to operating profit	0.1	(0.1)	0.6	0.6
Cash generated from operations	1,036.6	1,004.6	467.2	318.5
·				

The group has received property, plant and equipment of £52.4 million (2021: £55.0 million) in exchange for the provision of future goods and services (see notes 21 and A7).

Owned property, plant and equipment(1)

Group	2022 £m	2021 £m
Purchase of property, plant and equipment in statement of cash flows	609.0	610.4
Non-cash additions:		
Transfers of assets from customers (see note 21)	52.4	55.0
IAS 23 capitalised borrowing costs (see note 6)	52.1	30.3
Net book value transfers to intangible assets	-	1.0
Timing differences on cash paid ⁽²⁾	15.0	(18.8)
Property, plant and equipment additions	728.5	677.9

⁽¹⁾ This reconciliation relates to property, plant and equipment owned by the group and therefore excludes right-of-use assets recognised in accordance with IFRS 16 'Leases', for which cash flows relating to the associated lease liabilities are included within repayment of borrowings and interest paid in the statement of cash flows.

⁽²⁾ Timing differences arise and reverse when additions are recognised in the statement of financial position in a different period to when cash payments for capital expenditure are made. Capital accruals recognised in relation to these timing differences are included in 'Accruals and other creditors' within trade and other payables (note 21).

A1. Cash generated from operations (continued)

Group	2022 £m	2021 £m
Purchase of intangibles assets in statement of cash flows	19.5	33.6
IAS 23 capitalised borrowing costs (see note 6)	0.6	0.1
Net book value transfers from property, plant and equipment	-	(1.0)
Intangible asset additions	20.1	32.7

The company had no property, plant and equipment or intangible asset additions during the years ended 31 March 2022 and 31 March 2021.

For the year ended 31 March 2022, the group has enhanced its disclosures relating to the statement of cash flows in respect of relevant accounting policies, judgements taken, and how items can be reconciled to other areas of the financial statements. Please see note A7 for further details.

A2. Net Debt

Net debt comprises borrowings, net of cash and short-term deposits and derivatives. As such, movements in net debt during the year are impacted by changes in liabilities from financing activities as detailed in the tables below. The tables below should be read in conjunction with the consolidated statement of cash flows.

In the below tables, where derivatives are in an economic hedge of borrowings, derivative cash flows are shown netted with the net payment or receipt being reported against the underlying borrowing cash flow to provide a more faithful representation of the substance of the transaction.

The fair value of the derivatives reported in financing liabilities that are not hedging specific debt instruments are removed in calculating the group's net debt position. These derivatives correspond to the group's fixed interest rate swaps and inflation swaps, neither of which are designated within an IFRS 9 hedging relationship and both of which are classified as 'held for trading' under the accounting standard. The fair value movements on those derivatives that are not excluded from the revised definition of net debt (being derivatives in a fair value hedge relationship) are expected to be materially equal and opposite in value to the fair value movement included in borrowings, resulting in materially all fair value movements being excluded.

Fair value movements includes the indexation expense relating to the group's inflation swap portfolio of £29.9 million (2021: a credit of £0.7 million). The remaining fair value and foreign exchange movements in the year on the group's bond and bank borrowings are materially hedged by the fair value swap portfolio.

A2. Net Debt (continued)

	•	•																
				Borrowings		Derivatives												
	Bonds	Bank and other term borrowings	rm liabilities owed to value value liabilities cash in calcu		erm liabilities owed to value value liabilities cash in ngs ultimate hedge through from equivalents parent profit or financing undertakin loss activities		liabilities owed to value value liabilities cash ultimate hedge through from equivalents parent profit or financing undertakin loss activities		other term liabilities		es owed to value value liabilities cash in calculatir ultimate hedge through from equivalents net debt parent profit or financing undertakin loss activities		liabilities owed to value value liabilities cash in control of the control of the cash in cash in control of the cash in cash		value value liabilities cash in calculating through from equivalents net debug profit or financing		Adjustments in calculating net debt ⁽²⁾	Net debt
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m								
At 1 April 2021	(6,418.4)	(1,962.9)	(60.0)	(85.1)	263.0	40.5	(8,222.9)	733.6	98.4	(7,390.9)								
Non-cash movements																		
Inflation uplift on index-linked debt	(150.4)	(78.2)	-	-	-	-	(228.6)	-	-	(228.6)								
Fair value movements	203.3	5.1	-	-	(194.1)	99.8	114.1	-	(138.4)	(24.3)								
Foreign exchange	(5.6)	1.3	-	-	-	-	(4.3)	-	-	(4.3)								
Other	1.4	-	(4.5)	-	-	-	(3.1)	-	-	(3.1)								
Cash flows used in financing activities:																		
Receipts in respect of borrowings and derivatives	(173.7)	-	-	-	-	-	(173.7)	173.7	-	-								
Payments in respect of borrowings and derivatives ⁽¹⁾	375.0	304.8	2.1	0.7	-	-	682.6	(682.6)	-	-								
Dividends paid	-	-	-	-	-	-	-	(295.5)	-	(295.5)								
Other	-	-	-	-	-	-	-	1.6	-	1.6								
Changes arising from financing activities	250.0	233.0	(2.4)	0.7	(194.1)	99.8	462.0	(802.8)	(138.4)	(554.2)								
Cash flows used in investing activities	-	-	-	-	-	-	-	(639.7)	-	(639.7)								
Cash flows generated from operating activities	-	-	1.6	-	-	-	1.6	929.0	-	930.6								
At 31 March 2022	(6,168.4)	(1,729.9)	(60.8)	(84.4)	68.9	140.3	(7,834.3)	220.1	(40.0)	(7,654.2)								

A2. Net Debt (continued)

				Borrowings		Derivatives				
	Bonds	Bank and other term borrowings	Lease liabilities	Amounts owed to ultimate parent undertakin	In a fair value hedge	At fair value through profit or loss	Total liabilities from financing activities	Cash and cash equivalents	Adjustments in calculating net debt ⁽²⁾	Net debt
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 April 2020	(5,648.5)	(2,642.1)	(57.6)	(80.0)	395.7	80.1	(7,952.4)	514.0	131.7	(7,306.7)
Non-cash movements	-									
Inflation uplift on index-linked debt	(32.4)	(20.2)	-	-	-	-	(52.6)	-	-	(52.6)
Fair value movements	123.8	11.3	-	-	(140.6)	(39.6))	(45.1)	-	(33.3)	(78.4)
Foreign exchange	38.7	5.2	-	-	-	-	43.9	-	-	43.9
Other	0.7	-	(5.9)	-	-	-	(5.2)	-	-	(5.2)
Cash flows used in financing activities:										
Receipts in respect of borrowings and derivatives	(900.7)	(6.1)	-	(5.1)	(2.9)	-	(914.8)	912.8	-	(2.0)
Payments in respect of borrowings and derivatives ⁽¹⁾	-	689.0	1.7	-	10.8	-	701.5	(701.5)	-	-
Dividends paid	-	-	-	-	-	-	-	(291.9)	-	(291.9)
Changes arising from financing activities	(769.9)	679.2	(4.2)	(5.1)	(132.7)	(39.6)	(272.3)	(80.6)	(33.3)	(386.2)
Cash flows used in investing activities	-	-	-	-	-	-	-	(549.3)	-	(549.3)
Cash flows generated from operating activities	-	-	1.8	-	-	-	1.8	849.5	-	851.3
At 31 March 2021	(6,418.4)	(1,962.9)	(60.0)	(85.1)	263.0	40.5	(8,222.9)	733.6	98.4	(7,390.9)

A3. Borrowings

Terms and debt repayment schedule

The principal economic terms and conditions of outstanding borrowings, along with fair value and carrying value, were as follows:

		Year of	Fair	Carrying	Fair	Carrying
	Currency	final	value	value	value	value
_	re	epayment	2022	2022	2021	2021
Group	_		£m	£m	£m	£m
Borrowings in fair value hedge relationsh	-		2,511.5	2,494.0	2,913.6	2,895.5
5.75% 375m bond	GBP	2022	-	-	394.6	388.6
2.0% 450m bond	GBP	2025	450.1	441.2	470.6	465.3
2.867% 320m bond	HKD	2026	30.8	31.3	31.7	32.0
2.92% 739m bond	HKD	2026	71.0	72.4	73.2	74.1
1.129% 52m bond	EUR	2027	43.4	43.2	46.9	46.6
2.37% 830m bond	HKD	2027	77.0	80.4	79.6	81.9
5.625% 300m bond	GBP	2027	356.4	347.6	388.0	380.4
1.43% 100m bond	GBP	2028	95.4	94.1 -	-	
5.02% JPY 10bn dual currency loan	JPY/USD	2029	80.9	83.9	87.2	90.2
0.875% 300m bond	GBP	2029	269.0	274.6	284.8	295.8
0.175% 11bn bond	JPY	2030	64.5	67.6 -	-	
2.058% 30m bond	EUR	2030	26.4	25.7	28.9	28.6
2.625% 350m bond	GBP	2031	428.5	407.8	460.8	440.5
1.641% 30m bond	EUR	2031	25.6	24.5	28.0	27.4
2.9% 600m bond	HKD	2031	58.4	55.1	60.4	56.4
1.474% 35m bond	USD	2031	22.4	22.8	23.5	22.7
1.707% 28m bond	EUR	2032	23.8	24.0	26.1	27.0
1.653% 26m bond	EUR	2032	21.0	21.9	24.0	24.7
1.70% 30m bond	EUR	2033	25.3	25.7	27.8	29.0
2.0% 50m bond	GBP	2033	94.8	91.7	103.8	98.4
5.0% 200m bond	GBP	2035	246.8	258.5	273.7	285.9
Borrowings designated at fair value						
through profit or loss			369.9	369.9	373.6	397.5
6.875% 400m bond	USD	2028	369.9	369.9	373.6	397.5
Borrowings measured at amortised cost			6,368.1	5,200.3	6,653.2	5,243.9
Short-term bank borrowings - fixed	GBP	2021	49.2	49.2	150.7	150.7
0.80% + LIBOR 100m loan ⁽¹⁾	GBP	2022	-	-	101.1	100.0
0.47% + RPI 100m IL loan	GBP	2023	132.3	129.1	125.2	119.7
0.49% + RPI 100m IL loan	GBP	2025	134.3	124.2	126.6	115.2
0.013% + RPI 25m IL bond	GBP	2025	33.2	31.0	30.7	28.7
0.1275% + RPI 100m IL loan	GBP	2026	133.3	122.5	125.0	113.6
0.01% + RPI 20m IL bond	GBP	2028	26.6	25.3	25.0	23.7
1.23% + RPI 50m EIB (amortising) IL loan	GBP	2029	37.6	34.7	40.5	36.8
0.288% + CPI 100m IL loan	GBP	2029	117.0	107.6	113.9	102.1
1.29% + RPI 50m EIB (amortising) IL loan	GBP	2029	40.2	36.9	42.9	38.8
1.12% + RPI 50m EIB (amortising) IL loan	GBP	2029	39.7	36.6	42.4	38.5
1.10% + RPI 50m EIB (amortising) IL loan	GBP	2029	39.7	36.6	42.3	38.5
0.75% + RPI 50m EIB (amortising) IL loan	GBP	2029	41.2	38.2	43.6	39.8
0.76% + RPI 50m EIB (amortising) IL loan	GBP	2030	41.1	38.1	43.6	39.7
1.15% + RPI 50m EIB (amortising) IL loan	GBP	2030	41.5	37.9	44.1	39.6
1.11% + RPI 50m EIB (amortising) IL loan	GBP	2030	41.6	38.0	44.2	39.7
0.178% + RPI 35m IL bond	GBP	2030	49.7	43.3	46.1	40.2

A3. Borrowings (continued)

A3. Borrowings (continued)				_		
		Year of	Fair	Carrying	Fair	Carrying
Curi	rency	final	value	value	value	value
		epayment	2022	2022	2021	2021
Borrowings measured at amortised cost (conti	-	2004	£m	£m	£m	£m
0.245% + CPI 20m IL bond	GBP	2031	24.5	22.7	24.0	21.5
0.01% + RPI 38m IL bond	GBP	2031	50.8	47.6	48.6	44.5
3.375% + RPI 50m IL bond	GBP	2032	142.2	86.4	140.2	83.1
0.986% + SONIA 100m EIB (amortising) loan ⁽²⁾	GBP	2032	61.6	62.5	68.7	68.8
0.968% + SONIA 150m EIB (amortising) loan ⁽²⁾	GBP	2032	96.8	98.4	107.6	107.8
0.850% + SONIA 100m EIB (amortising) loan ⁽²⁾	GBP	2033	67.1	68.8	74.2	75.0
0.788% + SONIA 150m EIB (amortising) loan ⁽²⁾	GBP	2033	104.9	107.8	115.7	117.2
2.0% 250m bond(1)	GBP	2033	236.9	245.6	259.4	245.7
0.01% + RPI 100m EIB (amortising) IL loan	GBP	2033	97.6	91.8	100.3	92.2
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	73.2	68.8	75.3	69.1
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	76.0	71.3	77.9	71.4
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	75.9	71.3	77.9	71.4
1.9799% + RPI 100m IL bond	GBP	2035	242.4	161.1	243.9	155.2
1.150%+SONIA 100m EIB (amortising) loan ⁽²⁾	GBP	2035	83.5	84.4	91.6	90.6
1.117%+SONIA 75m EIB (amortising) loan ⁽²⁾	GBP	2035	66.6	65.6	71.2	70.3
0.01% + RPI 26.5m IL bond(1)	GBP	2036	36.3	35.1	35.7	33.0
0.379% + CPI 20m IL bond(1)	GBP	2036	25.4	22.7	25.6	21.5
0.01% + RPI 29m IL bond(1)	GBP	2036	39.5	36.6	38.9	34.2
0.093% + CPI 60m IL bond(1)	GBP	2037	73.2	67.6	73.7	64.1
1.66% + RPI 35m IL bond	GBP	2037	70.6	53.5	68.2	49.6
1.75% 250m bond(1)	GBP	2038	215.0	248.2	236.7	248.1
2.40% + RPI 70m IL bond	GBP	2039	152.2	104.4	148.8	96.8
1.7829% + RPI 100m IL bond	GBP	2040	255.2	159.4	237.4	153.5
0.01% + CPI 125m IL bond(1)	GBP	2040	143.9	151.3	144.5	145.6
1.3258% + RPI 50m IL bond	GBP	2040	120.1	79.6	117.8	76.6
1.5802% + RPI 100m IL bond	GBP	2041	248.9	158.9	205.1	153.1
1.875% 300m bond(1)	GBP	2042	257.1	295.5	287.7	295.3
1.5366% + RPI 50m IL bond	GBP	2043	51.1	31.7	49.6	30.6
1.397% + RPI 50m IL bond	GBP	2046	126.0	79.5	113.6	76.5
0.359% + CPI 32m IL bond(1)	GBP	2048	40.7	35.6	41.0	33.8
1.7937% + RPI 50m IL bond	GBP	2049	143.8	79.1	122.4	76.2
Commission for New Towns	CDD	2052	46.2	25.5	F2 6	26.2
(amortising) loan – fixed	GBP	2053	46.3	25.5	52.6	26.2
1.847% + RPI 100m IL bond	GBP	2056	252.7	161.5	255.0	149.8
1.815% + RPI 100m IL bond	GBP	2056	250.8	160.8	251.9	149.1
1.662% + RPI 100m IL bond	GBP	2056	244.6	160.5	241.6	148.8
1.5865% + RPI 50m IL bond	GBP	2056	120.1	80.2	122.0	74.4
1.591% + RPI 25m IL bond	GBP	2056	60.7	40.0	60.5	37.1
1.556% + RPI 50m IL bond	GBP	2056	122.2	79.8	121.6	74.0
1.435% + RPI 50m IL bond	GBP	2056	119.1	79.5	119.4	73.7
1.3805% + RPI 35m IL bond	GBP	2056	81.7	55.7	82.4	51.6
1.585% + RPI 100m IL bond	GBP	2057	241.2	154.5	311.2	143.2
0.387% + CPI 33m IL bond(1)	GBP	2057	42.6	36.4	44.4	34.5
1.702% + RPI 50m IL bond	GBP	2057	122.8	77.9	124.5	72.2
Amounts owed to ultimate parent undertaking	GBP	2021	84.4	84.4	85.1	85.1
Book overdrafts (see note 15)	GBP	2021	20.8	20.8	10.5	10.5
Lease liabilities	GBP	various	60.9	60.9	60.0	60.0
			9,249.5	8,064.2	9,941.0	8,536.9

A3. Borrowings (continued)

Notes

- (1) Loan repaid in October 2021. As such, the floating reference rate through to repayment was LIBOR.
- (2) Rates on these loans have been affected by the IBOR transition. The LIBOR/SONIA credit adjustment spread, finalised as a spread adjustment at 27.66bps in each instance, has been added to the fixed rate component referenced in the table to reflect the underlying fixed interest payable post IBOR reform. The loans all referenced LIBOR as the floating rate in the prior year. See accounting policies ('Phase II' IBOR Reform) and note A4 (Interest rate benchmark reform) for further details of the financial and accounting impacts of the IBOR rate reform.
- IL Index-linked debt this debt is adjusted for movements in the Consumer or Retail Prices Indices with reference to a base CPI or RPI established at trade date
- CPI The UK general index of consumer prices (for all items) as published by the Office for National Statistics (May 2015 = 100)
- RPI The UK general index of retail prices (for all items) as published by the Office for National Statistics (Jan 1987 = 100)
- EIB Borrowings that are held with the European Investment Bank

Borrowings in the above table are unsecured. Funding raised in currencies is swapped to sterling to match funding costs to income and assets.

The principal economic terms and conditions of outstanding borrowings, along with fair value and carrying value, were as follows:

Curi	rency re	Year of final epayment	Fair value 2022	Carrying value 2022	Fair value 2021	Carrying value 2021
Company			£m	£m	£m	£m
Borrowings measured at amortised cost						
Short-term bank borrowings – fixed	GBP	2022	-	-	100.0	100.0
Amounts owed to subsidiary undertakings	GBP	2022	-	-	696.5	696.5
Amounts owed to ultimate parent undertaking	GBP	2022	84.4	84.4	85.1	85.1
6.875% 400m bond	USD	2028	369.9	302.4	373.6	288.0
Lease liabilities	GBP	Various	2.6	2.6	2.8	2.8
			456.9	389.4	1,258.0	1,172.4

Borrowings are unsecured. Funding raised in currencies other than sterling is swapped to sterling to match funding costs to income and assets.

A4. Financial risk management

Risk management

The UUG board is responsible for treasury strategy and governance, which is reviewed on an annual basis.

The treasury committee, a subcommittee of the UUG board, has responsibility for setting and monitoring the group's adherence to treasury policies, along with oversight in relation to the activities of the treasury function.

Treasury policies cover the key financial risks: liquidity risk, credit risk, market risk (inflation, interest rate, electricity price and currency) and capital risk. As well as managing our exposure to these risks, these policies help the group maintain compliance with relevant financial covenants, which are in place primarily in relation to borrowings from the European Investment Bank (EIB) and include interest cover and gearing metrics. These policies are reviewed by the treasury committee for approval on at least an annual basis, or following any major changes in treasury operations and/or financial market conditions.

Day-to-day responsibility for operational compliance with the treasury policies rests with the treasurer. An operational compliance report is provided monthly to the treasury committee, which details the status of the group's compliance with the treasury policies and highlights the level of risk against the appropriate risk limits in place.

The group's treasury function does not act as a profit centre and does not undertake any speculative trading activity.

A4. Financial risk management (continued)

Liquidity risk

The group looks to manage its liquidity risk by maintaining liquidity within a UUG board approved duration range. Liquidity is actively monitored by the group's treasury function and is reported monthly to the treasury committee through the operational compliance report.

At 31 March 2022, the group had £1,040.9 million (2021: £1,444.1 million) of available liquidity, which comprised £240.9 million (2021: £744.1 million) of cash and short-term deposits and £800.0 million (2021: £700.0 million) of undrawn committed borrowing facilities. Short-term deposits mature within three months.

The group and company had available committed borrowing facilities as follows:

		Group		Company
	2022	2021	2022	2021
	£m	£m	£m	£m
Expiring within one year	100.0	100.0	45.0	20.0
Expiring after one year but in less than two years	150.0	100.0	35.0	20.0
Expiring after more than two years	550.0	600.0	225.0	205.0
Total borrowing facilities	800.0	800.0	305.0	245.0
Facilities drawn	-	(100.0)		(100.0)
Undrawn borrowing facilities	800.0	700.0	305.0	145.0

Note:

These facilities are arranged on a bilateral rather than a syndicated basis, which spreads the maturities more evenly over a longer time period, thereby reducing the refinancing risk by providing several renewal points rather than a large single refinancing point.

A4. Financial risk management (continued)

Maturity analysis

Concentrations of risk may arise if large cash flows are concentrated within particular time periods. The maturity profile in the following table represents the forecast future contractual principal and interest cash flows in relation to group and company's financial liabilities on an undiscounted basis. Derivative cash flows have been shown net where there is a contractual agreement to settle on a net basis; otherwise the cash flows are shown gross. This table does not include the impact of lease liabilities for which the maturity profile has been disclosed in note 17.

								More
	./1)	Adjust-	1 year	1-2	2-3	3-4	4-5	than 5
	Total ⁽¹⁾	ment ⁽²⁾	or less	years	years	years	years	years
Group At 31 March 2022	£m	£m	£m	£m	£m	£m	£m	£m
Bonds	11,289.3	_	137.6	138.6	589.7	267.2	130.0	10,026.2
Bank and other term	11,205.5		137.0	130.0	303.7	207.2	130.0	10,020.2
borrowings	2,050.6	-	341.7	133.4	268.9	269.5	131.4	905.7
Amounts owed to ultimate								
parent undertaking	9.4	-	9.4	-	-	-	-	-
Adjustment to carrying								
value ⁽²⁾	(13,454.9)	(13,454.9)			<u> </u>			
Borrowings	(105.6) ((13,454.9)	488.7	272.0	858.6	536.7	261.4	10,931.9
Derivatives:								
Payable	1,209.5	-	42.5	59.5	58.9	146.3	41.1	861.2
Receivable	(1,756.0)	-	(123.0)	(141.7)	(122.2)	193.5)	(86.5)	(1,089.1)
Adjustment to carrying								
value ⁽²⁾	226.3	226.3				-	-	
Derivatives – net assets	(320.2)	226.3	(80.5)	(82.2)	(63.3)	(47.2)	(45.4)	(227.9)
								More
	- (1)	Adjust-	1 year	1-2	2-3	3-4	4-5	than 5
Crown	Total ⁽¹⁾	ment ⁽²⁾	or less	years	years	years	years	than 5 years
Group	Total ⁽¹⁾ £m	•	•		_	_	_	than 5
At 31 March 2021	£m	ment ⁽²⁾	or less £m	years £m	years £m	years £m	years £m	than 5 years £m
•		ment ⁽²⁾	or less	years	years	years	years	than 5 years
At 31 March 2021 Bonds	£m	ment ⁽²⁾	or less £m	years £m	years £m	years £m	years £m	than 5 years £m
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate	£m 11,368.2 2,274.8	ment ⁽²⁾	or less £m 528.1 280.4	years £m 132.6	years £m 133.6	years £m 584.7	years £m 255.6	than 5 years £m 9,733.6
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking	£m 11,368.2	ment ⁽²⁾	or less £m 528.1	years £m 132.6	years £m 133.6	years £m 584.7	years £m 255.6	than 5 years £m 9,733.6
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying	£m 11,368.2 2,274.8 85.1	ment ⁽²⁾ £m - -	or less £m 528.1 280.4	years £m 132.6	years £m 133.6	years £m 584.7	years £m 255.6	than 5 years £m 9,733.6
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking	£m 11,368.2 2,274.8	ment ⁽²⁾	or less £m 528.1 280.4	years £m 132.6	years £m 133.6	years £m 584.7	years £m 255.6	than 5 years £m 9,733.6
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying	£m 11,368.2 2,274.8 85.1	ment ⁽²⁾ £m - -	or less £m 528.1 280.4	years £m 132.6	years £m 133.6	years £m 584.7	years £m 255.6	than 5 years £m 9,733.6
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾	fm 11,368.2 2,274.8 85.1 (5,251.2)	ment ⁽²⁾ £m - - (5,251.2)	or less £m 528.1 280.4 85.1	years £m 132.6 348.7	years £m 133.6 122.4	years £m 584.7 254.3	years £m 255.6 257.3	than 5 years £m 9,733.6 1,011.7
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings	fm 11,368.2 2,274.8 85.1 (5,251.2)	ment ⁽²⁾ £m - - (5,251.2)	or less £m 528.1 280.4 85.1	years £m 132.6 348.7	years £m 133.6 122.4	years £m 584.7 254.3	years £m 255.6 257.3	than 5 years £m 9,733.6 1,011.7
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable	fm 11,368.2 2,274.8 85.1 (5,251.2) 8,476.9	ment ⁽²⁾ £m - - (5,251.2)	or less £m 528.1 280.4 85.1	years £m 132.6 348.7 - 481.3 43.1	years £m 133.6 122.4 - 256.0	years £m 584.7 254.3 - - 839.0	years £m 255.6 257.3 - - 512.9	than 5 years £m 9,733.6 1,011.7
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable Adjustment to carrying	£m 11,368.2 2,274.8 85.1 (5,251.2) 8,476.9 1,001.2 (1,499.7)	ment ⁽²⁾ £m - (5,251.2) (5,251.2)	or less £m 528.1 280.4 85.1 	years £m 132.6 348.7 - 481.3 43.1	years £m 133.6 122.4 - 256.0 38.0	years £m 584.7 254.3 - - 839.0	years £m 255.6 257.3 - - 512.9 129.2	than 5 years £m 9,733.6 1,011.7 - 10,745.3 621.5 (794.1)
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable	fm 11,368.2 2,274.8 85.1 (5,251.2) 8,476.9	ment ⁽²⁾ £m - - (5,251.2)	or less £m 528.1 280.4 85.1 	years £m 132.6 348.7 - 481.3 43.1	years £m 133.6 122.4 - 256.0 38.0	years £m 584.7 254.3 - - 839.0	years £m 255.6 257.3 - - 512.9 129.2	than 5 years £m 9,733.6 1,011.7 10,745.3
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable Adjustment to carrying	£m 11,368.2 2,274.8 85.1 (5,251.2) 8,476.9 1,001.2 (1,499.7)	ment ⁽²⁾ £m - (5,251.2) (5,251.2)	or less £m 528.1 280.4 85.1 	years £m 132.6 348.7 - 481.3 43.1	years £m 133.6 122.4 - 256.0 38.0	years £m 584.7 254.3 - - 839.0	years £m 255.6 257.3 - - 512.9 129.2	than 5 years £m 9,733.6 1,011.7 - 10,745.3 621.5 (794.1)
At 31 March 2021 Bonds Bank and other term borrowings Amounts owed to ultimate parent undertaking Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable Adjustment to carrying value ⁽²⁾	£m 11,368.2 2,274.8 85.1 (5,251.2) 8,476.9 1,001.2 (1,499.7) 188.5	ment ⁽²⁾ £m - (5,251.2) (5,251.2) - 188.5	or less £m 528.1 280.4 85.1 893.6 133.4 (186.0)	years fm 132.6 348.7 - 481.3 43.1 (125.6)	years fm 133.6 122.4 - 256.0 38.0 (92.0)	years £m 584.7 254.3 839.0 36.0 (99.7)	years £m 255.6 257.3 - - 512.9 129.2 (202.3)	than 5 years £m 9,733.6 1,011.7 - 10,745.3 621.5 (794.1)

A4. Financial risk management (continued)

Maturity analysis (continued)

Notes:

- (1) Forecast future cash flows are calculated, where applicable, using forward interest rates based on the interest environment at yearend and are therefore susceptible to changes in market conditions. For index-linked debt it has been assumed that RPI will be three per cent and CPI will be two per cent over the life of each instrument.
- (2) The carrying value of debt is calculated following various methods in accordance with IFRS 9 'Financial Instruments' and therefore this adjustment reconciles the undiscounted forecast future cash flows to the carrying value of debt in the statement of financial position, excluding £60.9 million (2021: £60.0 million) of lease liabilities.

	Total ⁽¹⁾	Adjust- ment ⁽²⁾	1 year or less	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years
Company	£m	£m	£m	£m	£m	£m	£m	£m
At 31 March 2022	407.4		200	20.0	20.7	20 =	20.4	222.0
Bonds	427.1	-	20.9	20.8	20.7	20.5	20.4	323.8
Bank and other term borrowings Amounts owed to ultimate	-	-	-	-	-	-	-	-
parent undertaking	9.4	_	9.4	_	_	_	_	_
Amounts owed to subsidiary	3		5					
undertakings	-	-	-	-	-	-	-	-
Adjustment to carrying value ⁽²⁾	(124.7)	(124.7)	-	-	-	-	-	-
Borrowings	311.8	(124.7)	30.3	20.8	20.7	20.5	20.4	323.8
Derivatives:								
Payable	-	-	-	-	-	-	-	-
Receivable	-	-	-	-	-	-	-	-
Adjustment to carrying value ⁽²⁾								
Derivatives – net liabilities	-	-	-	-	-	-	-	-
								More
		Adjust-	1 year	1-2	2-3	3-4	4-5	than 5
	Total ⁽¹⁾	ment ⁽²⁾	or less	years	years	years	years	years
Company	£m	£m	£m	£m	£m	£m	£m	£m
At 31 March 2021	422.0		40.0	40.0	40.0	40.7	10.6	222.4
Bonds	422.0	-	19.9	19.9	19.8	19.7	19.6	323.1
Bank and other term borrowings Amounts owed to ultimate	100.3	-	100.3	-	-	-	-	-
parent undertaking	85.1	_	85.1	_	_	_	_	_
Amounts owed to subsidiary	03.1		03.1					
undertakings ,	696.5	-	696.5	-	-	-	-	-
Adjustment to carrying value ⁽²⁾	134.2	(134.2)	-	-	-	-		-
Borrowings	1,169.7	(134.2)	901.8	19.9	19.8	19.7	19.6	323.1
Derivatives:								
Payable		_	84.0	_	_	-	_	-
rayabic	84.0	_	04.0					
Receivable	84.0 (84.1)	-	(84.1)	-	-	-	-	-
•		-		-	-	-	-	-
Receivable	(84.1)	- - -		- - 	- - -	- 	- - -	- - -

Notes:

More

⁽¹⁾ Forecast future cash flows are calculated, where applicable, using forward interest rates based on the interest environment at yearend and are therefore susceptible to changes in market conditions.

⁽²⁾ The carrying value of debt is calculated following various methods in accordance with IFRS 9 'Financial Instruments' and therefore this adjustment reconciles the undiscounted forecast future cash flows to the carrying value of debt in the statement of financial position, excluding £2.6 million (2021: £2.8 million) of lease liabilities.

A4. Financial risk management (continued)

Credit risk

Credit risk arises principally from trading (the supply of services to customers) and treasury activities (the depositing of cash and holding of derivative instruments). While the opening of the non-household retail market to competition from 1 April 2017 has impacted on the profile of the group's concentration of credit risk, as discussed further below, the group does not believe it is exposed to any material concentrations that could have an impact on its ability to continue as a going concern or its longer-term viability.

The group manages its risk from trading through the effective management of customer relationships. Concentrations of credit risk with respect to trade receivables from household customers are limited due to the customer base being comprised of a large number of unrelated households. However, collection can be challenging as the Water Industry Act 1991 (as amended by the Water Industry Act 1999) prohibits the disconnection of a water supply and the limiting of supply with the intention of enforcing payment for certain premises, including domestic dwellings.

Following the non-household retail market opening to competition, credit risk in this area is now concentrated in a small number of retailers to whom the group provides wholesale water and wastewater services. Retailers are licensed and monitored by Ofwat and as part of the regulations they must demonstrate that they have adequate resources available to supply services. The credit terms for the group's retail customers are set out in market codes.

In reaction to the impact of the COVID-19 pandemic, changes were made to the payment terms set out within the market codes. These changes provided the option for extended credit terms for retailers. However, this has now ended and all outstanding payments have been made. As at 31 March 2022, Water Plus was the group's single largest debtor, with amounts outstanding in relation to wholesale services of £28.6 million (2021: £27.2 million). During the year, sales to Water Plus in relation to wholesale services were £363.1 million (2021: £362.9 million). Details of transactions with Water Plus can be found in note A6.

Under the group's revenue recognition policy, revenue is only recognised when collection of the resulting receivable is reasonably assured. Considering the above, the directors believe there is no further credit risk provision required in excess of the allowance for doubtful receivables (see note 14).

The group manages its credit risk from treasury activities by establishing a total credit limit by counterparty, which comprises a counterparty credit limit and an additional settlement limit to cover intra-day gross settlement of cash flows. In addition, potential derivative exposure limits are established to take account of potential future exposure which may arise under derivative transactions. These limits are calculated by reference to a measure of capital and credit ratings of the individual counterparties and are subject to a maximum single counterparty limit.

Credit limits are refreshed annually and reviewed in the event of any credit rating action. Additionally, a control mechanism to trigger a review of specific counterparty limits, irrespective of credit rating action, is in place. This entails daily monitoring of counterparty credit default swap levels and/or share price volatility. Credit exposure is monitored daily by the group's treasury function and is reported monthly to the treasury committee through the operational compliance report.

At 31 March 2022 and 31 March 2021, the maximum exposure to credit risk for the group and company is represented by the carrying amount of each financial asset in the statement of financial position:

A4. Financial risk management (continued)

Credit risk (continued)

		Group		Company Restated		
	2022	2021	2022	2021		
	£m	£m	£m	£m		
Cash and short-term deposits (see note 15)	240.9	744.1	57.5	9.1		
Trade and other receivables (see note 14)	2,113.6	2,103.9	2,631.0	3,264.1		
Investments (see note 12)	0.1	0.1	-	-		
Derivative financial instruments	457.4	424.7	-	-		
	2,812.0	3,272.8	2,688.5	3,273.2		

Included within trade and other receivables for the group are amounts owed by the ultimate parent undertaking of £1,809.4 million (2021: £1,788.0 million), and £80.2 million (2021: £86.7 million) of amounts owed by joint ventures in respect of borrowings, further details of which can be found in note A6.

The credit exposure on derivatives is disclosed gross of any collateral held. At 31 March 2022 the group held £49.2 million (2021: £50.7 million) and the company held £nil (2021: £nil) as collateral in relation to derivative financial instruments (included within short-term bank borrowings – fixed, in note A3).

Market risk

The group's exposure to market risk primarily results from its financing arrangements and the economic return which it is allowed on the regulatory capital value (RCV).

The group uses a variety of financial instruments, including derivatives, in order to manage the exposure to these risks.

Inflation risk

The group earns an economic return on its RCV, comprising a real return through revenues and an inflation return as an uplift to its RCV. For the 2020–2025 regulatory period, from 1 April 2020 the group's RCV is 50 per cent linked to RPI inflation and 50 per cent linked to CPIH inflation, with any new additions being added to the CPIH portion of the RCV.

The group's inflation hedging policy aims to have around half of the group's net debt in index-linked form (where it is economic to do so), by issuing index-linked debt and/or swapping a portion of nominal debt. This is currently weighted towards RPI-linked form, with circa 75 per cent of the hedge linked to RPI and circa 25 per cent linked to CPI and/or CPIH. These weightings are consistent with the prior financial year.

The group believes this is an appropriate inflation hedging policy taking into account a balanced assessment of the following factors: economic hedge of United Utilities Water Limited's (UUW) RCV and revenues; cash flow timing mismatch between allowed cost of debt and the group's incurred cost of debt; the inflation risk premium that is generally incorporated into nominal debt costs; income statement volatility; hedging costs; debt maturity profile mismatch risk; and index-linked hedging positioning relative to the water sector.

As a result of the evaluation of the above factors, the group will continue to identify opportunities to maintain around 50 per cent of the group's net debt being hedged for inflation, which can be evidenced by the increase in the CPI/CPIH-linked hedge proportion over the past few years. Inflation risk is reported monthly to the treasury committee in the operational compliance report.

The carrying value of index-linked debt held by the group, including the carrying value of the nominal debt swapped to CPI, was £4,220.4 million at 31 March 2021 (2020: £4,093.3 million).

A4. Financial risk management (continued)

Sensitivity analysis

The following table details the sensitivity of profit before tax to changes in the RPI and CPI on the group's index-linked borrowings. The sensitivity analysis has been based on the amount of index-linked debt held at the reporting date and, as such, is not indicative of the years then ended. In addition, it excludes the hedging aspect of the group's regulatory assets and post-retirement obligations.

	2022	2021
Group	£m	£m
Increase/(decrease) in profit before tax and equity		
1 per cent increase in RPI/CPI	(37.0)	(35.4)
1 per cent decrease in RPI/CPI	37.0	35.4

The sensitivity analysis assumes a one per cent change in RPI and CPI having a corresponding one per cent impact on this position over a 12-month period. It should be noted, however, that there is a time lag by which current RPI and CPI changes impact on the income statement, and the analysis does not incorporate this factor. The portfolio of index-linked debt is calculated on either a three or eight-month lag basis. Therefore, at the reporting date the index-linked interest and principal adjustments impacting the income statement are fixed and based on the annual RPI or CPI change either three or eight months earlier.

Company

The company had no material exposure to inflation risk at 31 March 2022 or 31 March 2021.

Interest rate risk

The group's policy is to structure debt in a way that best matches its underlying assets and cash flows. The group currently earns an economic return on its RCV, comprising a real return through revenues, determined by the real cost of capital fixed by the regulator for each five-year regulatory pricing period, and an inflation return as an uplift to its RCV (see inflation risk section for changes being introduced by Ofwat to inflation indexation from 2020).

From 1 April 2020 for the regulatory period to 2025, Ofwat has continued to set a fixed real cost of debt in relation to embedded debt (80 per cent of net debt), but has introduced a debt indexation mechanism in relation to new debt (20 per cent of net debt), where the allowed rate on new debt will vary in line with specific debt indices. The debt indexation mechanism will be settled as an end of regulatory period adjustment.

Sterling index-linked debt is left unswapped at inception, in accordance with our inflation hedging policy goal to maintain around half of the group's net debt in index-linked form. Conventional nominal debt is hedged as set out below.

Where conventional long-term debt is raised in a fixed-rate form, to manage exposure to long-term interest rates, the debt is generally swapped at inception to create a floating rate liability for the term of the liability through the use of interest rate swaps. These instruments are typically designated within a fair value accounting hedge.

To manage the exposure to medium-term interest rates, the group fixes underlying interest rates on nominal debt out to 10 years in advance on a reducing balance basis. As such, at the start of each regulatory period, a proportion of the projected nominal net debt representing new debt for that regulatory period, will remain floating until it is fixed via the above 10-year reducing balance basis, which should approximate Ofwat's new debt indexation mechanism.

A4. Financial risk management (continued)

This interest rate hedging policy dovetails with our inflation hedging policy should we need to swap a portion of nominal debt to real rate form to maintain our desired mix of nominal and index-linked debt.

The group seeks to manage its risk by maintaining its interest rate exposure within a board-approved range. Interest rate risk is reported to the treasury committee through the operational compliance report.

Sensitivity analysis

The following table details the sensitivity of the group's profit before tax and equity to changes in interest rates. The sensitivity analysis has been based on the amount of net debt and the interest rate hedge positions in place at the reporting date and, as such, is not indicative of the years then ended.

	Group			Company	
	2022	2021	2022	2021	
	£m	£m	£m	£m	
Increase/(decrease) in profit before					
tax and equity					
1 per cent increase in interest rate	89.4	121.9	(1.2)	(8.7)	
1 per cent decrease in interest rate	(94.2)	(133.9)	1.1	8.7	

The sensitivity analysis assumes that both fair value hedges and borrowings designated at fair value through profit or loss are effectively hedged and it excludes the impact on post-retirement obligations. The exposure largely relates to the fair value movements on the group's fixed interest rate swaps which manage the exposure to medium-term interest rates. Those swaps are not included in hedge relationships.

Hedge accounting

Details regarding the interest rate swaps designated as hedging instruments to manage interest rate risk are summarised below:

Average contracted fixed interest rate %	-	-	1.00	2.15
Notional principal amount £m	-	-	450.0	1,425.0
	1 year or less	1 to 2 years	2 to 5 years	Over 5 years

This table represents the derivatives that are held in fair value hedging relationships, with only the weighted average for the fixed interest elements of the swaps disclosed.

Further detail on the fair value hedging relationships is provided below:

Risk exposure

Interest rate risk on borrowings

	£m
Nominal amount of hedging instruments 1,8	875.0
Carrying amount of hedging instruments	45.8
Accumulated fair value (gains)/losses on hedged items	33.9
Fair value (gains)/losses used for calculating hedge ineffectiveness for the year ended 31 March 202	2 ⁽¹⁾ :
Hedged items (1	64.6)
Hedging instrument	162.7
Hedge ineffectiveness recognised in the income statement	(1.9)
Nominal amount of hedging instruments directly impacted by the IBOR reform 1,6	675.0
Note:	

(1) The change in fair value of the hedging instruments used to measure hedge ineffectiveness exclude interest accruals and changes in credit spread adjustments. The full impact of fair value movements on the income statement is disclosed in note 6.

A4. Financial risk management (continued)

Currency risk

Currency exposure principally arises in respect of funding raised in foreign currencies. To manage exposure to currency rates, foreign currency debt is hedged into sterling through the use of cross-currency swaps and these are often designated within a fair value accounting hedge. The group seeks to manage its risk by maintaining currency exposure within board-approved limits. Currency risk in relation to foreign currency denominated financial instruments is reported monthly to the treasury committee through the operational compliance report. The group and company have no material net exposure to movements in currency rates.

Hedge accounting

Details regarding the cross-currency interest rate swaps designated as hedging instruments to manage currency and interest rate risk are summarised below:

	1 year or less	1 to 2 years	2 to 5 years	Over 5 years
Notional principal amount £m	-	-	99.9	442.9
Average contracted fixed interest rate %	-	-	1.92	0.96

This table represents the derivatives that are held in fair value hedging relationships, with only the weighted average for the fixed interest elements of the swaps disclosed.

Further detail on the fair value hedging relationships is provided below:

Risk exposure

Foreign currency and interest rate risk on borrowings

	£m
Nominal amount of hedging instruments	542.8
Carrying amount of hedging instruments	23.0
Accumulated fair value (gains)/losses on hedged items	31.8
Fair value (gains)/losses used for calculating hedge ineffectiveness for the year ended 31 N Hedged items Hedging instrument	March 2022 ⁽¹⁾ : (34.8) 36.7
Hedge ineffectiveness recognised in the income statement Nominal amount of hedging instruments directly impacted by the IBOR reform	1.9 442.8
Note:	

⁽¹⁾ The change in fair value of the hedging instruments used to measure hedge ineffectiveness exclude interest accruals and changes in credit spread adjustments. The full impact of fair value movements on the income statement is disclosed in note 6.

Interest rate benchmark reform

Globally, financial regulators are requiring that market participants cease using certain financial market benchmark reference rates (i.e. interbank offered rates, IBORs), and transition to the use of alternative nearly risk-free rates (RFRs).

The only benchmark reference rate that the group was exposed to was GBP LIBOR, which ceased on 31 December 2021. In the run up to 31 December 2021, the group fully transitioned all of its financial instruments away from GBP LIBOR.

A4. Financial risk management (continued)

Interest rate benchmark reform (continued)

Floating rate loans payable were re-documented to replace references to GBP LIBOR with appropriate sterling risk free rates or, where the maturity date was sufficiently short, repaid early to avoid re-documentation. Derivatives were transitioned away from GBP LIBOR by the group and all of its counterparties adhering to the ISDA 2020 IBOR fall-backs protocol, which has automatically replaced references in derivatives to GBP LIBOR with risk free rates, and systems were upgraded to enable accurate recording and valuation of transitioned financial instruments. Inter-company loans and loans receivable with the group's principal joint venture have also been restructured to reference the Bank of England Base Rate.

The group is not exposed to any other benchmark reference rate and so its activities in relation to interest rate benchmark reform are now complete.

In August 2020, the IASB issued Interest Rate Benchmark Reform Phase II, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (the Phase II Amendments), and the group has applied all relevant amendments when accounting for the impact of the IBOR transition in the year.

Applying the ISDA fall-back provisions in transitioning the group's derivative portfolio has maintained economic equivalence across the financial instruments held in fair value hedges and, as a result, immaterial hedge ineffectiveness was recorded in the group's income statement in the year.

The amount of financial instruments that transitioned to alternative benchmarks is set out below. Non-derivative financial instruments are presented at their carrying value, with the derivatives at their nominal value, in order to give the fairest representation of the magnitude of instruments that transitioned to RFRs. In addition to the below, the group held £800 million of undrawn committed facilities as at 31 December 2021 that transitioned away from referencing LIBOR to reference sterling risk free rates.

Amounts transitioned to RFR

Type of financial instrument	£m
Non-derivative financial liabilities (pay GBP LIBOR)	501.6
Derivative instruments (pay GBP LIBOR)*	2,343.9
Derivative instruments (receive GBP LIBOR)*	(2,822.1)
Net position	23.4

Repricing analysis

The following tables categorise the group's borrowings, derivatives and cash deposits on the basis of when they reprice or, if earlier, mature. The repricing analysis demonstrates the group's exposure to floating interest rate risk.

Our largest concentration of floating interest rate risk is with index-linked instruments. This has been classified as repricing in one year or less due to the refixing of the interest charge with changes in RPI and CPI.

A4. Financial risk management (continued)

Net bollowings							
Net borrowings	(744.1) 7,878.0	4,570.9	165.5	576.1	350.9	203.7	2,010.9
Total borrowings Cash and short-term deposits	8,622.1 (744.1)	<u>5,315.0</u> (744.1)	165.5	576.1	350.9	203.7	2,010.9
parent undertaking	85.1	85.1	<u>-</u>	-		-	
Amounts owed to ultimate							
Total external borrowings	8,537.9	5,229.9	165.5	576.1	350.9	203.7	2,010.9
Effect of fixed interest rate swaps		(2,332.3)	164.5	575.0	350.0	200.0	1,042.8
	5,267.9	4,293.1	1.0	1.1	0.9	3.7	968.1
Floating rate instruments Index-linked instruments	725.4 3,516.5	725.4 3,516.5	-	-	-	-	-
Fixed rate instruments	1,026.0	51.2	1.0	1.1	0.9	3.7	968.1
Borrowings measured at amortis	ed cost						
2550 01 511 445	373.6	373.6			-	-	_(3/3.0)
Fixed rate instruments Effect of swaps	3/3.6	- 373.6	-	-	-	-	373.6 (373.6)
Borrowings designated at fair value	_	-	ss				272.0
•	2,895.5	2,895.5					
Fixed rate instruments Effect of swaps	2,895.5 -	388.6 2,506.9	-	-	465.3 (465.3)	106.1 (106.1)	1,935.5 (1,935.5)
Borrowings in fair value hedge re		-					
Group At 31 March 2021	£m	£m	£m	£m	£m	£m	£m
	Total	1 year or less	1-2 years	2-3 years	3-4 years	4-5 years	than 5 years
Net borrowings	7,823.3	4,680.7	576.1	351.9	203.2	1.4	2,010.0
Cash and short-term deposits	(240.9)	(240.9)					
Total borrowings	8,064.2	4,921.6	576.1	351.9	203.2	1.4	2,010.0
Amounts owed to ultimate parent undertaking	84.4	84.4		-			
Total external borrowings	7,979.8	4,837.2	576.1	351.9	203.2	1.4	2,010.0
Effect of fixed interest rate swaps	·	(2,267.8)	575.0	350.0	200.0		1,142.8
	5,115.9	4,241.1	1.1	1.9	3.2	1.4	867.2
Index-linked instruments	3,682.7	3,682.7					
Fixed rate instruments Floating rate instruments	924.9 508.3	50.1 508.3	1.1	1.9	3.2	1.4	867.2 -
Borrowings measured at amortis							
	369.9	369.9					-
Fixed rate instruments Effect of swaps	369.9	369.9	- -	-	-	-	369.9 (369.9)
Borrowings designated at fair valu	2,494.0 e through	2,494.0			<u>-</u>	<u>-</u>	
Effect of swaps		2,494.0		(441.2)	(103.7)	<u>-</u>	(1,949.1)
Fixed rate instruments	2,494.0	-	-	441.2	103.7	-	1,949.1
At 31 March 2022 Borrowings in fair value hedge re	elationshi	ps					
Group	£m	£m	£m	£m	£m	£m	£m
	Total	1 year or less	1-2 years	2-3 years	3-4 years	4-5 years	than 5 years
A4. Tillaliciai fisk managemen	(000000						More

A4. Financial risk management (continued)

							More
		1 year	1-2	2-3	3-4	4-5	than 5
	Total	or less	years	years	years	years	years
Company	£m	£m	£m	£m	£m	£m	£m
At 31 March 2022							
Borrowings measured at amortis							
Fixed rate instruments	305.0	-		-		-	305.0
Total external borrowings	305.0			-			305.0
Amounts owed to ultimate							
parent undertaking	84.4	84.4					
Total borrowings	389.4	84.4	-	-			
Cash and short-term deposits	(57.5)	(57.5)		-			
Net borrowings	331.9	26.9					305.0
							More
		1 year	1-2	2-3	3-4	4-5	than 5
	Total	or less	years	years	years	years	years
Company	£m	£m	£m	£m	£m	£m	£m
At 31 March 2021							
Borrowings measured at amortis	ed cost						
Fixed rate instruments	390.8						390.8
Total external borrowings	390.8	-	-	-		-	390.8
Amounts owed to subsidiary undertakings Amounts owed to ultimate	696.5	696.5	-	-	-	-	-
parent undertaking	85.1	85.1	-	-	-	-	-
Total borrowings	1,172.4	781.6	-	-			390.8
Cash and short-term deposits	(9.1)	(9.1)					-
Net borrowings	1,163.3	772.5					390.8

Electricity price risk

The group is allowed a fixed amount of revenue by the regulator, in real terms, to cover electricity costs for each five-year regulatory pricing period. To the extent that electricity prices remain floating over this period, this exposes the group to volatility in its operating cash flows. The group's policy, therefore, is to manage this risk by fixing a proportion of electricity commodity prices in a cost-effective manner. The group has fixed the price on a proportion of its anticipated net electricity usage out to the end of the regulatory period from 2020 to 2025, partially through entering into electricity swap contracts. The company has no exposure to electricity price risk.

Hedge accounting

Electricity swaps have been designated in cash flow hedge relationships. This means that only the impact of any hedging ineffectiveness is recognised through fair value in the income statement, with movements in the effective portion of the hedge being recognised in other comprehensive income.

A4. Financial risk management (continued)

Hedge accounting (continued)

Details of electricity swaps that have been designated in cash flow hedging relationships are summarised below:

	1 year or less	1 to 2 years	2 to 5 years	Over 5 years
Notional amount MWh	306,480	329,400	350,280	-
Average contracted fixed interest rate %	46.52	46.35	45.95	-

Risk exposure	Electricity price risk
Nominal amount of hedging instruments	45.6
Carrying amount of hedging instruments Fair value (gains)/losses used for calculating hedge ineffectiveness	111.1
for the year ended 31 March 2022 ⁽¹⁾ :	(106.7)
Hedge ineffectiveness recognised in the income statement	-
Cash flow hedge reserve	86.3
Amount reclassified from the cash flow hedge reserve to the income statement	(1.3)
Ni-1-	

Note:

Due to the relative low value of the electricity swaps in comparison to that of the derivative portfolio, no maturity profile and fixed price breakdown has been disclosed.

Capital risk management

The group's objective when managing capital is to maintain efficient access to debt capital markets throughout the economic cycle. The board therefore believes that it is appropriate to maintain RCV gearing, measured as group consolidated net debt (including derivatives) to regulatory capital value (RCV) of UUW, within a target range of 55 per cent to 65 per cent. As at 31 March 2022, RCV gearing was within the range at 62 per cent (2021: 62 per cent).

Assuming no significant changes to existing rating agencies' methodologies or sector risk assessments, the group aims to maintain long term issuer credit ratings for UUW of at least A3 with Moody's Investors Service (Moody's) and BBB+ with S&P Global (S&P) and a senior unsecured debt rating for UUW of at least A- with Fitch Ratings (Fitch). Debt issued by UUW's financing subsidiary, United Utilities Water Finance PLC, is guaranteed by UUW and is therefore rated in line with UUW.

To maintain its targeted credit ratings, the group needs to manage its capital structure with reference to the ratings methodology and measures used by Moody's, S&P and Fitch. The ratings methodology is normally based on a number of key ratios (such as RCV gearing, adjusted interest cover, post maintenance interest cover (PMICR), Funds from Operations (FFO) to debt, and debt to EBITDA) and threshold levels as updated and published from time to time by Moody's, S&P and Fitch. The group looks to manage its risk by maintaining the relevant key financial ratios used by the credit ratings agencies to determine a corporate's credit rating, within the thresholds approved by the board. Capital risk is reported monthly to the treasury committee through the operational compliance report.

Further detail on the precise measures and methodologies used to assess water companies' credit ratings can be found in the methodology papers published by the rating agencies.

⁽¹⁾ The change in fair value of the hedging instruments used to measure hedge ineffectiveness exclude credit spread adjustments. The full impact of fair value movements on the income statement is disclosed in note 6.

A4. Financial risk management (continued)

Fair values

The table below sets out the valuation basis of financial instruments held at fair value and financial instruments where fair value has been separately disclosed in the notes as the carrying value is not a reasonable approximation of fair value.

Group	Level 1	Level 2	Level 3	Total
2022	£m	£m	£m	£m
Financial assets at fair value through profit or loss				
Derivative financial assets – fair value hedge	-	156.3	-	156.3
Derivative financial assets – held for trading ⁽¹⁾	-	190.1	-	190.1
Derivative financial assets – cash flow hedge	-	111.0	-	111.0
Investments	-	0.1	-	0.1
Financial liabilities at fair value through profit or loss				
Derivative financial liabilities – fair value hedge	-	(87.4)	-	(87.4)
Derivative financial liabilities – held for trading ⁽¹⁾	-	(49.8)	-	(49.8)
Derivative financial assets – cash flow hedge	-	-	-	-
Financial liabilities designated as fair value through profit of	or loss -	(369.9)	-	(369.9)
Financial instruments for which fair value has been disclo	sed			
Financial liabilities in fair value hedge relationships	(2,206.6)	(304.9)	-	(2,511.5)
Other financial liabilities at amortised cost	(2,383.8)	(3,984.3)	-	(6,368.1)
	(4,590.4)	(4,338.8)		(8,929.2)
	<u> </u>			
	_	_	_	_
Group	Level 1	Level 2	Level 3	Total
2021	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
2021 Financial assets at fair value through profit or loss		£m		£m
2021 Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge		£m 275.6	£m	£m 275.6
Pinancial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾		£m 275.6 142.6		£m 275.6 142.6
Pinancial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge		£m 275.6 142.6 6.5	£m	£m 275.6 142.6 6.5
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments		£m 275.6 142.6	£m - -	£m 275.6 142.6
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss		£m 275.6 142.6 6.5 0.1	£m - -	£m 275.6 142.6 6.5 0.1
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge		£m 275.6 142.6 6.5 0.1 (12.6)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾		£m 275.6 142.6 6.5 0.1	£m - -	£m 275.6 142.6 6.5 0.1
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge	£m	£m 275.6 142.6 6.5 0.1 (12.6) (102.1)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6) (102.1)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Financial liabilities designated as fair value through profit of	£m	£m 275.6 142.6 6.5 0.1 (12.6)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Financial liabilities designated as fair value through profit of the financial instruments for which fair value has been disclosed.	£m or loss - sed	fm 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6) (102.1) - (373.6)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Financial liabilities designated as fair value through profit of the financial instruments for which fair value has been disclose Financial liabilities in fair value hedge relationships	£m	fm 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6) (147.6)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6) (2,913.6)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Financial liabilities designated as fair value through profit of the financial instruments for which fair value has been disclosed.	£m or loss - sed	fm 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6) (147.6)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6) (102.1) - (373.6)
Financial assets at fair value through profit or loss Derivative financial assets – fair value hedge Derivative financial assets – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Investments Financial liabilities at fair value through profit or loss Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Derivative financial assets – cash flow hedge Financial liabilities designated as fair value through profit of the financial instruments for which fair value has been disclose Financial liabilities in fair value hedge relationships	£m	fm 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6) (147.6) (4,789.9)	£m - -	£m 275.6 142.6 6.5 0.1 (12.6) (102.1) (373.6) (2,913.6)

Note:

- These derivatives form economic hedges and, as such, management intends to hold these through to maturity. Derivatives forming an economic hedge of the currency exposure on borrowings included in these balances were £130.1 million (2021: £141.5 million).
- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable).

A4. Financial risk management (continued)

Fair values (continued)

Company 2022	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value through profit or loss Derivative financial assets – held for trading ⁽¹⁾ Financial liabilities at fair value through profit or loss	-	-	-	-
Derivative financial liabilities – held for trading ⁽¹⁾ Financial instruments for which fair value has been disclosed	-	-	-	-
Financial liabilities in fair value hedge relationships	-	-	-	-
Other financial liabilities at amortised cost		(456.9)		(456.9)
	-	(456.9)	-	(456.9)
Company	Level 1	Level 2	Level 3	Total
2021	£m	£m	£m	£m
Financial assets at fair value through profit or loss Derivative financial assets – held for trading ⁽¹⁾	-	-	-	-
Financial liabilities at fair value through profit or loss Derivative financial liabilities – held for trading ⁽¹⁾ Financial instruments for which fair value has been disclosed	-	-	-	-
Financial liabilities in fair value hedge relationships	_	_	_	_
Other financial liabilities at amortised cost	-	(1,258.0)	-	(1,258.0)
	-	(1,258.0)	-	(1,258.0)

Note:

The group has calculated fair values using quoted prices where an active market exists, which has resulted in £4,590.4 million (2021: £5,087.6 million) of 'level 1' fair value measurements. In the absence of an appropriate quoted price, the group has applied discounted cash flow valuation models utilising market available data in line with prior years. The £497.2 million decrease (2021: £2,906.2 million decrease) in level 1 fair value measurements primarily reflects the maturity of the 5.75 per cent £375 million bond in March 2022, which was classified as a level 1 fair value measurement in the prior financial year, and a reduction in the number of observable quoted bond prices in active markets at 31 March 2022.

During the year, changes in the fair value of financial liabilities designated at fair value through profit or loss resulted in a £0.4 million loss (2021: £23.9 million loss). Included within this was a £4.2 million gain (2021: £43.3 million loss) attributable to changes in own credit risk, recognised in other comprehensive income. The cumulative amount due to changes in credit spread was £39.9 million profit (2021: £35.7 million profit). The carrying amount is £143.8 million (2021: £147.5 million) higher than the amount contracted to settle on maturity.

⁽¹⁾ These derivatives form economic hedges and, as such, management intends to hold these through to maturity.

A5. Retirement benefits

Defined benefit schemes

Under the group's defined benefit pension schemes – the United Utilities Pension Scheme (UUPS) and the United Utilities PLC group of the Electricity Supply Pension Scheme (ESPS) – employees are entitled to annual pensions on retirement. Benefits are payable on death and following other events such as withdrawing from active service. No other post-retirement benefits are provided to these employees.

The assets of these schemes are held in trust funds independent of the group's finances. The trustees are composed of representatives of both the employer and employees, who are required by law to act in the interests of all relevant beneficiaries and are responsible for the investment policy with regards to the assets plus the day-to-day administration of the benefits.

As at 31 March, the total fair value of the schemes' assets, and the present value of the defined benefit obligations, and therefore the value of the net retirement benefit surplus included in the consolidated statement of financial position, was as follows:

		Group		Company
	2022	2021	2022	2021
	£m	£m	£m	£m
Total fair value of schemes' assets	4,035.7	3,984.7	1,031.9	1,018.4
Present value of defined benefit obligations	(3,018.9)	(3,295.7)	(786.3)	(860.4)
Net retirement benefit surplus	1,016.8	689.0	245.6	158.0

Estimated future benefits payable

The defined benefit obligation includes benefits for current employees, former employees and current pensioners as analysed in the table below:

			Company		
	2022	2021	2022	2021	
	£m	£m	£m	£m	
Total value of current employees benefits	504.7	783.5	42.8	66.4	
Deferred members benefits	602.1	574.4	266.7	254.4	
Pensioner members benefits	1,912.1	1,937.8	476.8	539.6	
Total defined benefit obligation	3,018.9	3,295.7	786.3	860.4	

A5. Retirement benefits (continued)

Movements in the present value of the defined benefit obligations are as follows:

	Group		Company	
	2022	2021	2022	2021
	£m	£m	£m	£m
At the start of the year	(3,295.7)	(3,057.6)	(860.4)	(801.1)
Interest cost on schemes' obligations	(66.5)	(68.5)	(17.2)	(18.0)
Actuarial (losses)/gains arising from changes in				
financial assumptions	164.0	(429.7)	41.4	(106.2)
Actuarial gains/(losses) arising from changes in				
demographic assumptions	52.4	80.6	13.2	20.1
Actuarial gains arising from experience	(5.0)	25.4	6.7	10.0
Curtailments/settlements	-	(0.6)	-	(0.2)
Member contributions	(2.3)	(2.4)	(0.1)	(0.1)
Benefits paid	141.7	162.0	30.5	35.4
Current service cost	(7.5)	(4.9)	(0.4)	(0.3)
At the end of the year	(3,018.9)	(3,295.7)	(786.3)	(860.4)

The duration of the combined schemes is around 17 years. The schemes' duration is an indicator of the weighted-average time until benefit payments are settled, taking account of the split of the defined benefit obligation between current employees, deferred members and the current pensioners of the schemes.

Funding of future benefits payable

Under UK legislation there is a requirement that pension schemes are funded prudently, and that funding plans are agreed by pension scheme trustees. The defined benefit schemes are subject to funding valuations carried out by independent qualified actuaries, in conjunction with the schemes' trustees, on a triennial basis. These valuations inform the level of future contributions to be made by the group in order to ensure that the schemes are appropriately funded and therefore that benefits can be paid. The latest finalised funding valuation was carried out as at 31 March 2021, and determined that the schemes were fully funded on a low-dependency basis without any funding deficit that requires additional contributions from the company over and above those related to current service and expenses.

The schemes' funding plans are reviewed regularly, including between funding valuations. The group expects to make further contributions of £9.1 million in the year ending 31 March 2023, £8.0 million in respect of current service contributions and £1.1 million in respect of expenses. Annual contributions are expected to be broadly similar to this until at least the point at which the next triennial valuation (due as at 31 March 2024), is finalised, which is expected to be towards the end of the year ending 31 March 2025. At this point a detailed re-evaluation of the level of annual contributions, and the basis on which these are made, will take place.

The group and trustees have agreed long-term strategies for reducing investment risk in each scheme. This includes an asset-liability matching policy which aims to reduce the volatility of the funding level of the pension plan by investing in assets, such as corporate bonds and gilts, supplemented by swap and gilt long-term hedges of interest and inflation rates, which perform in line with the liabilities so as to hedge against changes in interest and inflation rates. Both the UUPS and ESPS schemes are fully hedged for inflation exposure through external market swaps and gilts. Further details of the derivatives used in reducing investment risk are disclosed in the 'Schemes' assets' section of this appendix.

In addition to the strategies implemented to date, the group and trustees are committed to exploring further de-risking options that may be implemented in the future, including in relation to longevity risk.

A5. Retirement benefits (continued)

The basis on which scheme liabilities are valued for funding purposes differs from the basis required under IAS 19 'Employee Benefits', with liabilities on a funding basis being subject to assumptions at the valuation date that are not updated between revaluations. Funding deficits vary significantly from company to company, but neither the deficits, the assumptions on which they are based, the associated sensitivities, nor the risk exposures are disclosed by many companies and, therefore, meaningful cross-company comparisons are not possible. Conversely, scheme liabilities are valued on a consistent basis between companies under IAS 19 and are subject to assumptions and sensitivities that are required to be disclosed. Consequently, the relative economic positions of companies are comparable only on an IAS 19 basis, subject to normalisation of assumptions used between companies.

A retirement benefit surplus was recognised as an asset in the consolidated statement of financial position at both 31 March 2022 and 31 March 2021 as, under both the UUPS and ESPS scheme rules, the group has an unconditional right to a refund of the surplus assuming the gradual settlement of plan liabilities over time until all members have left the plans.

Impact of scheme risk management on IAS 19 disclosures

Under the prescribed IAS 19 basis, pension scheme liabilities are calculated based on current accrued benefits. Expected cash flows are projected forward allowing for RPI and CPI and the current member mortality assumptions. These projected cash flows are then discounted using a high-quality corporate bond rate, which comprises an underlying interest rate and a credit spread.

The group has de-risked its pension schemes through hedging strategies applied to the underlying interest rate and future inflation. Both UUPS and ESPS fully hedge RPI inflation exposure along with underlying interest rates through external market swaps and gilts (including gilt repurchase instruments), the value of which is included in the schemes' assets (net of associated derivative liabilities).

Consequently, the reported statement of financial position under IAS 19 remains volatile due to changes in credit spread and changes in mortality, neither of which have been hedged at the current time.

Changes in credit spreads have not been hedged primarily due to difficulties in doing so over long durations. In contrast, the schemes' specific funding bases are unlikely to suffer from significant volatility due to credit spread, because a prudent, fixed credit spread assumption is applied.

Changes in mortality have not been hedged due to this exposure being subject to lower volatility in the short term and relatively high hedging costs, though the group and scheme trustees are committed to exploring options to de-risk changes in mortality, or pension longevity, in future periods, as outlined above.

Pension benefits under the defined benefit element of the UUPS hybrid section, which represents a relatively small proportion of total defined benefit obligations, are linked to CPI rather than RPI.

In the year ended 31 March 2022, the discount rate increased by 0.75 per cent (2021: 0.25 per cent decrease), which includes a 0.35 per cent increase in credit spreads and a 0.4 per cent increase in gilt yields over the year. The IAS 19 remeasurement gain of £313.6 million (2021: £82.7 million loss) reported in note 18 has largely resulted from an increase in credit spreads during the year partially offset by an RPI inflation assumption increase of 0.4 per cent (2021: 0.55 per cent increase). The impact of movements in credit spreads is less pronounced on a scheme funding basis compared with the remeasurement loss recognised on an IAS 19 accounting basis as the discount rate used for valuing obligations utilises a fixed credit spread assumption.

A5. Retirement benefits (continued)

Reporting and assumptions

The results of the latest funding valuation at 31 March 2021 have been used to inform the group's best estimate assumptions to use in calculating the defined benefit pension position reported on an IAS 19 basis at 31 March 2022. The results of the funding valuation have been adjusted to take account of experience over the period, changes in market conditions, and differences in the financial and demographic assumptions. The present value of the defined benefit obligation, and the related current service costs, were measured using the projected unit credit method.

Member data used in arriving at the liability figure included within the overall IAS 19 surplus has been based on the finalised actuarial valuations as at 31 March 2021 for both UUPS and ESPS.

Financial assumptions

The main financial and demographic assumptions used by the actuary to calculate the defined benefit surplus of UUPS and ESPS are outlined below:

	2021	2020
Group and Company	% p.a.	% p.a.
Discount rate	2.80	2.05
Pension increases	3.75	3.35
Pensionable salary growth (pre-2018 service):		
ESPS	3.75	3.35
UUPS	3.75	3.35
Pensionable salary growth (post-2018 service):		
ESPS	3.75	3.35
UUPS	3.20	2.75
Price inflation - RPI	3.75	3.35
Price inflation - CPI ⁽¹⁾	3.20	2.75

⁽¹⁾ The CPI price inflation assumption represents a single weighted average rate derived from an assumption of 2.85 per cent pre-2030 and 3.65 per cent post-2030 (31 March 2021: 2.45 per cent pre-2030 and 3.25 per cent post-2030).

The discount rate is consistent with a high-quality corporate bond rate, with 2.80 per cent being equivalent to gilts plus 1.10 basis points (31 March 2021: 2.05 per cent being equivalent to gilts plus 75 basis points). The corporate bond population used in deriving this rate comprises corporate bonds rated at least AA by one or more credit rating agencies.

In accordance with the scheme rules, pensionable salary growth is linked to RPI for UUPS for service pre-2018 and CPI for service post-2018, for ESPS the growth is linked to RPI.

Assumed pension increases are aligned to the RPI price inflation assumption as the vast majority of benefits across the schemes have a direct RPI linkage. In September 2019, the Chancellor of the Exchequer highlighted the UK Statistic Authority's proposals to change RPI to align with CPIH (Consumer Prices Index, including housing costs). Plans to reform RPI and bring it in line with CPIH from 2030 were confirmed on 25 November 2020, though this is subject to judicial review. Broadly CPIH increases are expected to average around 1 per cent per annum below RPI in the long-term (about the same as CPI), so this change could have a significant impact on many pension schemes.

A5. Retirement benefits (continued)

Demographic assumptions

At 31 March 2022, the base tables used for the mortality in retirement assumption are the Continuous Mortality Investigation's (CMI) S3PA (2021:S2PA) year of birth tables, with a scaling factor of 109 per cent (2021: 106 per cent) and 115 per cent (2021: 109 per cent) for male pensioners and non-pensioners respectively and 110 per cent (2021: 104 per cent) and 111 per cent (2021: 105 per cent) for female pensioners and non-pensioners respectively, reflecting the profile of the membership. At 31 March 2022, future improvements in mortality are based on the extended CMI 2021 (2021: CMI 2020) projection model, with a long-term annual rate of improvement of 1.25 per cent (2021: 1.25 per cent). To adjust for the impact of circumstances arising as a result of the COVID-19 pandemic on future mortality trends for the schemes' membership, an adjustment has been made to reflect an expectation that the direct and indirect consequences of the pandemic will have an adverse impact on longevity in the short to medium term. Accordingly, in arriving at the mortality assumptions for the current year, the group has included a w2021 parameter of 10 per cent within the CMI 2021 projections, which is a subjective estimate that has an impact of circa £30 million decrease in the defined benefit obligation. All other parameters within the future improvements model are consistent with the prior year.

The current life expectancies at age 60 underlying the value of the accrued liabilities for the schemes are:

2022

2021

	2022	2021
Group and Company	years	years
Retired member - male	25.9	26.0
Non-retired member - male	26.5	26.9
Retired member - female	27.9	28.4
Non-retired member - female	29.0	29.5

Sensitivity of the key scheme assumptions

The assumptions used in measuring the group's defined benefit surplus reflect management's best estimates as at the reporting date. These estimates inherently involve judgement, and the measurement of the defined benefit surplus is sensitive to changes in these key assumptions. These sensitivities, together with further information on the judgements involved and level of estimation uncertainty, are presented below. Sensitivity calculations allow for the specified movement in the relevant key assumption, while all other assumptions are held constant. This approach does not take into account the interrelationship between some of these assumptions or any hedging strategies adopted, however it demonstrates how reasonably possible changes could impact on the measurement of the defined benefit surplus.

- Asset volatility If the schemes' assets underperform relative to the discount rate used to calculate the
 schemes' liabilities, this will create a deficit. The schemes hold some growth assets (equities, diversified
 growth funds and emerging market debt) which, though expected to outperform the discount rate in the
 long term, create volatility in the short term. The allocation to growth assets is monitored to ensure it
 remains appropriate given the schemes' long-term objectives.
- Discount rate An increase/decrease in the discount rate of 0.25 per cent would have resulted in a £119.7/£127.7 million (2021: £142.1/£151.9 million) decrease/increase in the schemes' liabilities at 31 March 2022, although as long as credit spreads remain stable this will be largely offset by an increase/decrease in the value of the schemes' bond holdings and other instruments designed to hedge this exposure. The discount rate is based on high-quality corporate bond yields of a similar duration to the schemes' liabilities. High quality corporate bonds are considered to be those that have a credit rating of AA or above with at least one rating agency. An alternative approach could be taken whereby only those bonds rated AA or higher by at least two rating agencies are used. While this alternative approach may provide additional comfort around the quality of these corporate bonds, management believes that the wider population of corporate bonds under a 'single agency' approach gives a more representative indication of high quality corporate bonds that are aligned to the schemes' liabilities, and therefore provides a more robust estimate.

A5. Retirement benefits (continued)

- Price inflation An increase/decrease in the inflation assumption of 0.25 per cent would have resulted in a £111.5/105.2 million (2021: £144.3/£136.1 million) increase/decrease in the schemes' liabilities at 31 March 2022, as a significant proportion of the schemes' benefit obligations are linked to inflation. However, nearly all of the schemes' liabilities were hedged for RPI in the external market at 31 March 2022, meaning that this sensitivity is likely to be insignificant as a result. The sensitivity to price inflation allows for the impact of changes to pensionable salary growth and pension increases, which are both assumed to be linked to price inflation. While inflation may be volatile in the near term, as has been the case during the year ended 31 March 2022, the value of the schemes' liabilities is based on inflation assumptions that reflect the full profile of the liabilities, in particular the long-term nature.
- Consistent with market practice, and reflecting the possibility that inflation may rise or fall more than expected in the future, in arriving at the company's best estimate for RPI, an inflation risk premium of 0.2 per cent (2021: 0.2 per cent) has been deducted from the breakeven inflation rate for the year ended 31 March 2022. The impact of this is a decrease in the defined benefit obligation of around £90 million and therefore an increase in the net defined benefit surplus compared with no inflation risk premium being deducted. There is no allowance for any further change in the inflation risk premium post 2030 as a result of RPI reform. A reduction in expected RPI will result in a reduction to the value of pension scheme liabilities; however, as our pension schemes are hedged for RPI inflation movements, this will result in a comparable reduction to the value of pension scheme assets.
- The assumption for CPI is set by deducting a 'wedge' from the RPI inflation assumption to reflect structural differences. For pre-2030 inflation this wedge has been estimated at 0.9 per cent per annum, reducing to 0.1 per cent per annum post-2030 given that RPI and CPI are expected to converge. The impact of this reduction in the post-2030 wedge as a result of RPI reform is a circa £8 million increase to the defined benefit obligation and therefore a decrease in the net defined benefit surplus compared with the wedge remaining at 0.9 per cent per annum after 2030.
- Mortality long-term improvement rate An increase in the mortality long-term improvement rate from 1.25 per cent to 1.50 per cent would have resulted in a £29.1 million decrease in the schemes' liabilities at 31 March 2022 (2021: £33.2 million decrease in the schemes' liabilities).
- Life expectancy An increase/decrease in life expectancy of one year would have resulted in a £135.0 million (2021: £152.8 million) increase/decrease in the schemes' liabilities at 31 March 2022. The majority of the schemes' obligations are to provide benefits for the life of the member and, as such, the schemes' liabilities are sensitive to these assumptions.

A5. Retirement benefits (continued)

Further reporting analysis

At 31 March, the fair values of the schemes' assets recognised in the statement of financial position were as follows

				Group				Company
	Underlying	Fair value of	S	chemes'	Underlying	Fair value of		Schemes'
	assets	derivatives	Combined	assets	assets	derivatives	Combined	assets
	£m	£m	£m	%	£m	£m	£m	%
At 31 March 2022								
Non-equity growth								
assets	606.6	-	606.6	15.0	133.8	-	133.8	13.0
Gilts	2,839.1	(1,657.6)	1,181.5	29.3	624.8	(284.8)	340.0	32.9
Bonds	1,708.0	(3.7)	1,704.3	42.2	442.6	(2.1)	440.5	42.7
Other	423.0	120.3	543.3	13.5	82.0	35.6	117.6	11.4
Total fair value of								
schemes' assets	5,576.7	(1,541.0)	4,035.7	100.0	1,283.2	(251.3)	1,031.9	100.0
At 31 March 2021								
Non-equity growth								
assets	406.6	-	406.6	10.2	99.1	-	99.1	9.7
Gilts	2,784.3	(1,409.8)	1,374.5	34.5	595.5	(246.6)	348.9	34.3
Bonds	1,859.2	(5.8)	1,853.4	46.5	480.7	1.1	481.8	47.3
Other	376.2	(26.0)	350.2	8.8	96.0	(7.5)	88.5	8.7
Total fair value of								
schemes' assets	5,426.3	(1,441.6)	3,984.7	100.0	1,271.3	(253.0)	1,018.3	100.0

Included within the group's defined benefit pension scheme assets are assets with a fair value estimated to be £270.2 million that are categorised as 'level 3' assets within the IFRS 13 'Fair value measurement' hierarchy, meaning that the value of the assets is not observable at 31 March 2022. Estimates of the fair value of these assets have been performed by the investment managers' valuation specialists using the latest available statements of each of the funds that make up the total level 3 asset balance, updated for any subsequent cash movements between the statement date and the year end reporting date.

The UUPS has entered into a variety of derivative transactions to change the return characteristics of the assets held to reduce undesirable market and liability risks. As such, the above breakdown separates the assets of the schemes to illustrate the underlying risk characteristics of the assets held.

The portfolio contains a proportion of assets set aside for collateral purposes linked to the derivative contracts entered into. The collateral portfolio, comprising cash and eligible securities readily convertible to cash, provides sufficient liquidity to manage exposure relating to the derivative transactions and is expected to achieve a return in excess of SONIA (Sterling Overnight Index Average).

A5. Retirement benefits (continued)

The derivative values in the table above represent the net market value of derivatives held within each of these asset categories as follows:

		Group		Company
Group	2022 £m	2021 £m	2022 £m	2021 £m
Gilts				
Repurchase agreements	(1,657.6)	(1,409.8)	(284.8)	(246.6)
	(1,657.6)	(1,409.8)	(284.8)	(246.6)
Bond – hedging non-sterling exposure back to sterling				
Currency forwards Interest rate swaps	(1.4) (2.3)	(8.9) 3.1	(1.9) (0.2)	(1.5) 2.6
	(3.7)	(5.8)	(2.1)	1.1
Other – managing liability risks targeting a high level of	interest rate	and inflation	n hedging	
Asset swaps Interest rate swaps RPI inflation swaps Total return swaps	(32.5) 18.0 134.2 0.6 ———————————————————————————————————	(26.6) 23.2 (21.5) (1.2) (26.0)	(5.6) 3.1 37.6 0.5 ———————————————————————————————————	(4.6) 4.1 (6.0) (1.0) (7.5)
Total fair value of derivatives	(1,541.0)	(1,441.6)	(251.3)	(253.0)

The derivatives shown in the tables only cover those expressly held for the purpose of reducing certain undesirable asset and liability risks. The schemes invest in a number of other pooled funds that make use of derivatives. No allowance is made in the figures above for any derivatives held within these other pooled funds, as they are not held expressly for the purpose of managing risk. The total fair value of pooled funds held within the schemes' assets was £681.5 million (2021: £667.2 million) for the group and £167.2 million (2021: £144.7 million) for the company.

The intention is that the schemes' assets provide a full economic hedge of interest rates and RPI inflation of the schemes' liabilities on a scheme funding basis. As the scheme funding basis is more prudent than the IAS 19 measurement basis for the defined benefit obligation, the schemes are more than 100 per cent hedged on an accounting basis.

A5. Retirement benefits (continued)

Movements in the fair value of the schemes' assets were as follows:

	Group		Company
2022	2021	2022	2021
£m	£m	£m	£m
3,984.7	3,811.7	1,018.4	976.1
80.8	86.0	20.4	22.1
102.2	241.0	23.6	55.6
2.3	2.4	0.1	0.1
(141.7)	(162.0)	(30.5)	(35.4)
(2.1)	(3.0)	(1.0)	(1.0)
9.5	8.6	0.9	0.9
4,035.7	3,984.7	1,031.9	1,018.4
	fm 3,984.7 80.8 102.2 2.3 (141.7) (2.1) 9.5	2022 2021 £m £m 3,984.7 3,811.7 80.8 86.0 102.2 241.0 2.3 2.4 (141.7) (162.0) (2.1) (3.0) 9.5 8.6	2022 2021 2022 £m £m £m 3,984.7 3,811.7 1,018.4 80.8 86.0 20.4 102.2 241.0 23.6 2.3 2.4 0.1 (141.7) (162.0) (30.5) (2.1) (3.0) (1.0) 9.5 8.6 0.9

The actual return on the schemes' assets was a gain of £183.0 million (2021: £327.0 million gain) for the group and a gain of £44.1 million (2021: £77.7 million gain) for the company, largely as a result of the schemes' investment strategies hedging increases in the technical provisions due to change in financial conditions.

A6. Related party transactions

Group

Transactions between the company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

The related party transactions with the group's joint ventures during the period and amounts outstanding at the period end date were as follows:

	2022 £m	2021 £m
Sales of services	363.1	362.9
Charitable contributions advanced to related parties	0.1	-
Purchase of goods and services	-	-
Interest income and fees recognised on loans to joint ventures	2.8	3.7
Amounts owed by related parties	116.4	113.8
Amounts owed to related parties	-	2.4

Sales of services to related parties during the year mainly represent non-household wholesale charges to Water Plus that were billed during the period. These transactions were on market credit terms in respect of non-household wholesale charges, which are governed by the wholesale charging rules issued by Ofwat.

Charitable contributions advanced to related parties during the year relate to amounts paid to Rivington Heritage Trust, a charitable company limited by guarantee for which United Utilities Water Limited is one of three guarantors.

A6. Related party transactions (continued)

At 31 March 2022, amounts owed by joint ventures, as recorded within trade and other receivables in the statement of financial position, were £116.4 million (2021: £113.8 million), comprising £28.5 million (2021: £27.1 million) of trade balances, which are unsecured and will be settled in accordance with normal credit terms, and £80.4 million (2021: £86.7 million) relating to loans. £6.1 million owed by Water Plus relating to the surrender of consortium relief tax losses is also included within the amounts owed by joint ventures as at 31 March 2022.

Included within these loans receivable were the following amounts owed by Water Plus:

- £79.4 million (2021: £66.3 million) outstanding on a £100.0 million revolving credit facility provided by
 United Utilities PLC, with a maturity date of December 2023, bearing a floating interest rate of the Bank of
 England base rate plus a credit margin. This balance comprises £80.5 million outstanding net of a £1.1
 million allowance for expected credit losses (2021: £67.5 million outstanding net of a £1.2 million
 allowance for expected credit losses);
- £1.0 million (2021: £0.7 million) receivable being the £10.6 million (2021: £10.3 million) fair value of amounts owed in relation to a £12.5 million unsecured loan note held by United Utilities PLC, with a maturity date of 28 March 2027, net of a £0.1 million (2021: £0.1 million) allowance for expected credit losses and £9.5 million of the group's share of joint venture losses relating to historic periods as the loan note is deemed to be part of the group's long-term interest in Water Plus. This is a zero coupon shareholder loan with a total amount outstanding at 31 March 2022 and 31 March 2021 of £12.5 million, comprising a £10.6 million (2021: £10.3 million) receivable representing the present value of the £12.5 million payable at maturity discounted using an appropriate market rate of interest at the inception of the loan, and £1.9 million (2021: £2.2 million) recorded as an equity contribution to Water plus recognised within interests in joint ventures.

In the prior year, amounts owed by Water Plus also included £18.3 million outstanding on a £32.5 million revolving credit facility provided by United Utilities PLC, comprising £32.5 million outstanding net of the group's £14.2 million share of Water Plus losses allocated against this amount as at 31 March 2021. At that date, the facility formed part of the group's long-term interest in the Water Plus joint venture given that there was a clear expectation that this revolving credit facility would be replaced with additional share capital, with this transaction subsequently executed in April 2021. Accordingly, this £18.3 million balance ceased to be treated as a related party receivable and was recognised as an addition to the group's joint ventures balance during the year ended 31 March 2022 (see note 12).

A further £1.4 million (2021: £1.4 million) of non-current receivables was owed by other related parties at 31 March 2022.

During the year, United Utilities PLC provided guarantees in support of Water Plus in respect of certain amounts owed to wholesalers. The aggregate limit of these guarantees was £54.1 million, of which £32.1 million related to guarantees to United Utilities Water Limited.

At 31 March 2022, amounts owed to related parties were nil (March 2021: £2.4 million). The amount outstanding at 31 March 2021 included £1.1 million due to Water Plus for the surrender of consortium relief tax losses including other amounts due to be settled in accordance with normal credit terms. These amounts were paid during the current year bringing this balance to a nil position.

A6. Related party transactions (continued)

The following transactions were carried out with the group's ultimate parent undertaking, United Utilities Group PLC:

	Interest r	eceivable
	2022	2021
	£m	£m
Ultimate parent undertaking	21.0	24.2
	Intercompa tax relie	any group of payable
	2022	2021
	£m	£m
Ultimate parent undertaking	8.6	4.6

		Amounts owed by related parties		Amounts owed to related parties	
	2022	2021	2022	2021	
	£m	£m	£m	£m	
Ultimate parent undertaking	1,809.4	1,788.0	93.0	91.9	

Details of transactions with key management are disclosed in note 3.

Company

The company receives dividend income and pays and receives interest and recharges costs to and from subsidiary undertakings and its ultimate parent company in the normal course of business.

Total dividend income received during the year from subsidiary undertakings amounted to £339.2 million (2021: £6.3 million), comprising dividends totalling £339.2 (2021: £nil) received from United Utilities North West.

Total net interest receivable during the year from subsidiary undertakings was £25.8 million (2021: £27.6 million), and total fair value gains during the year relating to balances with subsidiary undertakings were £17.4 million (2021: £39.0 million losses). In addition, total net interest receivable during the year from the ultimate parent company was £21.0 million (2021: £24.2 million). Amounts outstanding at 31 March 2022 between the parent company, subsidiary undertakings and ultimate parent undertaking are provided in notes 16, 21 and A3.

An allowance for doubtful receivables of £4.8 million (2021: £98.1 million) has been made for amounts owed by subsidiary undertakings (see note 14). In the year ended 31 March 2022, a charge of £0.8 million was recorded in respect of bad or doubtful receivables due from subsidiary undertakings (2021: £0.7 million charge).

As at 31 March 2021, total guarantees given by the company to its related parties were £1,149.7 million (2021: £1,206.8 million). Included within these guarantees were the following amounts:

- £1,087.7 million (2020: £1,145.2 million) relating to United Utilities Water Limited's loans from the European Investment Bank;
- Guarantees with an aggregate limit of £54.1 million (2021: £54.1 million) relating to Water Plus in respect
 of certain amounts owed to wholesalers, of which £32.1 million (2021: £32.1 million) related to guarantees
 to United Utilities Water Limited; and
- Performance guarantees with an aggregate limit of £7.9 million (2021: £7.5 million) given to subsidiaries.

A7. Accounting policies

Of the accounting policies outlined below, those deemed to be the most significant for the group are those that align with the critical accounting judgements and key sources of estimation uncertainty set out on pages 111 to 114.

Basis of consolidation

The group financial statements consolidate the financial statements of the company and entities controlled by the company (its subsidiaries). The results of subsidiaries acquired or disposed of during the year are included in the consolidated income statement from the date control is obtained or until the date that control ceases, as appropriate.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies used under the relevant local GAAP into line with those used by the group. Amounts attributable to non-controlling interests are presented separately in equity and total comprehensive income where material.

Subsidiaries

Subsidiaries are entities controlled by the group. Control is achieved where the group is exposed to, or has the rights to, variable returns from its involvement in an entity and has the ability to affect those returns through its power over the entity. In the parent company accounts, investments are held at cost less provision for impairment.

On acquisition, the assets and liabilities and contingent liabilities of a subsidiary are measured at their fair values at the date of acquisition. Any excess of the cost of acquisition over the fair values of the identifiable net assets acquired is recognised as goodwill. Any deficiency of the cost of acquisition below the fair values of the identifiable net assets acquired is credited to the income statement in the period of acquisition. All intra-group transactions, balances, income and expenses are eliminated on consolidation.

Joint ventures

Joint ventures are entities in which the group holds an interest on a long-term basis and which are jointly controlled with one or more parties under a contractual arrangement. The group's share of joint venture results and assets and liabilities is incorporated using the equity method of accounting. Under the equity method, an investment in a joint venture is initially recognised at cost and adjusted thereafter to recognise the group's share of the profit or loss. In the parent company accounts, investments in joint ventures are held at cost less provision for impairment.

On losing control of a subsidiary disposed of to a joint venture, the group recognises the gain or loss attributable to measuring the investment retained in the former subsidiary at its fair value at the date when control is lost.

In the parent company separate financial statements, the company has elected to apply the equity method of accounting for joint ventures as described in IAS 28.

Revenue recognition

Revenue from the sale of water, wastewater and other services represents the fair value of the consideration receivable in the ordinary course of business for the goods and services provided, exclusive of value added tax and foreign sales tax. Where relevant, this includes an estimate of the sales value of units supplied to customers between the date of the last meter reading and the period end.

A7. Accounting policies (continued)

There are two main areas of the group's activities considered to result in revenue being recognised:

- the provision of core water and wastewater services, accounting for more than 97 per cent of the group's revenue; and
- capital income streams relating to diversions work, and activities, typically performed opposite property
 developers, that facilitate the creation of an authorised connection through which properties can obtain
 water and wastewater services.

The core water and wastewater services, which are deemed to be a distinct performance obligation under the contracts with customers, follow the same pattern of transfer to the customer who simultaneously receive and consumes both of these services over time.

Revenue is generally recognised at the time of delivery, with consideration given as to whether collection of the full amount under the contract is considered probable. Should the group consider that the criteria for revenue recognition has not been met for a transaction, revenue recognition would be delayed until such time as collectability is deemed probable.

Payments received in advance of revenue recognition are recorded as deferred income. This includes the revenue in respect of connection activities, itself a distinct performance obligation. The revenue in respect of these activities is released to the income statement over a period of 60 years, which is deemed to be the time over which the performance obligation for providing the connection is satisfied.

Operating profit

Operating profit is stated after charging operational expenses but before investment income and finance expense.

Borrowing costs and finance income

Except as noted below, all borrowing costs and finance income are recognised in the income statement on an accruals basis. Transaction costs that are directly attributable to the acquisition or issue of a financial asset or financial liability are included in the initial fair value of that instrument. Where borrowing costs are attributable to the acquisition, construction or production of a qualifying asset, such costs are capitalised as part of the specific asset.

Tax

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity. Assessing the outcome of uncertain tax positions requires judgements to be made regarding the application of tax law and the result of negotiations with, and enquiries from, tax authorities. A current tax provision is only recognised when the group has a present obligation as a result of a past event and it is probable that the group will be required to settle that obligation to a taxing authority.

Current tax

Current tax is based on the taxable profit for the period and is provided at amounts expected to be paid or recovered using the tax rates and laws that have been enacted or substantively enacted at each reporting date.

A7. Accounting policies (continued)

Taxable profit differs from the net profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible.

Current tax is charged or credited in the income statement, except when it relates to items charged or credited to equity, in which case the tax is also dealt with in equity.

Deferred tax

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are provided, using the liability method, on all taxable temporary differences at each reporting date. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and interests in joint ventures, except where the group 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 measured at the average tax rates that are expected to apply in the periods in which the temporary timing differences are expected to reverse based on tax rates and laws that have been enacted or substantively enacted at each reporting date.

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

Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited to equity, in which case the deferred tax is also dealt with in equity.

Property, plant and equipment

Property, plant and equipment comprises water and wastewater infrastructure assets and overground assets.

The useful economic lives of these assets are primarily as follows:

- water and wastewater infrastructure assets:
 - impounding reservoirs 200 years;
 - mains and raw water aqueducts 30 to 300 years;
 - sewers and sludge pipelines 60 to 300 years;
 - sea outfalls 75 years;
- buildings 10 to 60 years;
- operational assets 5 to 80 years; and
- fixtures, fittings, tools and equipment 3 to 40 years.

Employee and other related costs incurred in implementing the capital schemes of the group are capitalised.

A7. Accounting policies (continued)

The group is required to evaluate the carrying values of PPE for impairment whenever circumstances indicate, in management's view, that the carrying value of such assets may not be recoverable. An impairment review requires management to make uncertain estimates concerning the cash flows, growth rates and discount rates of the cash generating units under review.

Costs associated with a major inspection or overhaul of an asset or group of assets are capitalised within property, plant and equipment and depreciated over the period of time expected to elapse between major inspections or overhauls.

Water and wastewater infrastructure assets

Infrastructure assets comprise a network of water and wastewater pipes and systems. Expenditure on the infrastructure assets, including borrowing costs where applicable, relating to increases in capacity or enhancements to the operating capability and/or resilience of the network is treated as additions. Amounts incurred in maintaining the operating capability and/or resilience of the network in accordance with current standards of service are expensed in the year in which the expenditure is incurred. Infrastructure assets are depreciated by writing off their cost (or deemed cost for infrastructure assets held on transition to IFRS), less the estimated residual value, evenly over their useful economic lives.

Other assets

All other property, plant and equipment is stated at historical cost less accumulated depreciation.

Historical cost includes expenditure that is directly attributable to the acquisition of the items, including relevant borrowing costs, where applicable, for qualifying assets. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably. All other repairs and maintenance costs are charged to the income statement during the financial period in which they are incurred.

Freehold land and assets in the course of construction are not depreciated. Other assets are depreciated by writing off their cost, less their estimated residual value, evenly over their estimated useful economic lives, based on management's judgement and experience.

Depreciation methods, residual values and useful economic lives are reassessed annually and, if necessary, changes are accounted for prospectively. The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in other operating costs.

Transfer of assets from customers and developers

Where the group receives from a customer or developer an item of property, plant and equipment (or cash to construct or acquire an item of property, plant and equipment) that the group must then use, either to connect the customer to the network, or to provide the customer with ongoing access to a supply of goods or services, or to do both, such items are capitalised at their fair value and included within property, plant and equipment, with a credit of the same amount to deferred grants and contributions. The assets are depreciated over their useful economic lives and the deferred contributions released to revenue over 60 years, which is the estimated period over which an average connection through which the group provides water and wastewater services is expected to be in place (or where the receipt of property, plant and equipment is solely to connect the customer to the network, the deferred contribution is released immediately to revenue). This interpretation has been applied to transfers of assets from customers received on or after 1 July 2009.

Assets transferred from customers or developers are accounted for at fair value. If no market exists for the assets then incremental cash flows are used to arrive at fair value.

A7. Accounting policies (continued)

Intangible assets

Intangible assets are measured initially at cost and are amortised on a straight-line basis over their estimated useful economic lives. The carrying amount is reduced by any provision for impairment where necessary. On a business combination, as well as recording separable intangible assets already recognised in the statement of financial position of the acquired entity at their fair value, identifiable intangible assets that arise from contractual or other legal rights are also included in the acquisition statement of financial position at fair value.

Internal expenditure is capitalised as internally generated intangibles only if it meets the criteria of IAS 38 'Intangible Assets'.

Intangible assets, which relate primarily to computer software, are generally amortised over a period of three to 10 years.

The group expenses costs incurred in the implementation and ongoing operation of computing systems built and delivered on a 'software as a service' (SaaS) basis and hosted in an external cloud environment. These do not generally give rise to an identifiable intangible asset that the group controls. In limited circumstances, costs incurred in association with the implementation and customisation of a SaaS system may enhance the group's existing digital infrastructure and would be expected to generate broader future economic benefit. Where this results in an identifiable intangible asset that the group controls, the costs are capitalised in accordance with IAS 38 and subsequently amortised over a period of three to 10 years.

Impairment of assets

Where appropriate, assets are reviewed for impairment at each reporting date to determine whether there is any indication that those assets may have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any. Where the asset does not generate cash flows that are independent from other assets, the group estimates the recoverable amount of the cash generating unit to which the asset belongs.

The recoverable amount is the higher of fair value less costs to sell, and value in use. Value in use represents the net present value of expected future cash flows, discounted on a pre-tax basis, using a 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.

If the recoverable amount of an asset (or cash generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash generating unit) is reduced to its recoverable amount. Impairment losses in respect of non-current assets are recognised in the income statement within operating costs.

Where an impairment loss subsequently reverses, the reversal is recognised in the income statement and the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but not so as to exceed the carrying amount that would have been determined had no impairment loss been recognised in prior years.

A7. Accounting policies (continued)

Non-current assets held for sale

Non-current assets classified as held for sale are measured at the lower of carrying value and fair value less costs to sell. Non-current assets are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as having been met only when the sale is highly probable and the asset is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Financial instruments

Financial assets and financial liabilities are recognised and derecognised on the group's statement of financial position on the trade date when the group becomes/ceases to be a party to the contractual provisions of the instrument.

Cash and short-term deposits

Cash and short-term deposits include cash at bank and in hand, deposits and other short-term highly liquid investments which are readily convertible into known amounts of cash, have a maturity of three months or less from the date of acquisition and which are subject to an insignificant risk of change in value. In the consolidated statement of cash flows and related notes, cash and cash equivalents include cash and short-term deposits, net of book overdrafts.

Financial investments

Investments (other than interests in subsidiaries, joint ventures and fixed deposits) are initially measured at fair value, including transaction costs. Investments classified as financial assets measured at fair value through profit or loss (FVPL) in accordance with IFRS 9 'Financial Instruments' are measured at subsequent reporting dates at fair value. Gains and losses arising from changes in the net profit or loss for the period. The business model employed in respect of financial assets is that of a hold-to-collect model.

Trade receivables

Trade receivables are initially measured at fair value, and are subsequently measured at amortised cost, less any impairment for irrecoverable amounts. Estimated irrecoverable amounts are based on historical experience of the receivables balance.

Trade payables

Trade payables are initially measured at fair value and are subsequently measured at amortised cost.

Financial liabilities and equity

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the group after deducting all of its liabilities.

Equity instruments

Equity instruments issued by the group are recorded at the proceeds received, net of direct issue costs.

Borrowings

The group's default treatment is that bonds and loans are initially measured at fair value, being the cash proceeds received net of any direct issue costs. They are subsequently measured at amortised cost applying the effective interest method. The difference between the net cash proceeds received at inception and the principal cash flows due at maturity is accrued over the term of the borrowing.

A7. Accounting policies (continued)

The default treatment of measuring at amortised cost, while associated hedging derivatives are recognised at fair value, presents an accounting measurement mismatch that has the potential to introduce considerable volatility to both the income statement and the statement of financial position. Therefore, where feasible, the group takes advantage of the provisions under IFRS 9 'Financial Instruments' to make fair value adjustments to its borrowing instruments to reduce this volatility and better represent the economic hedges that exist between the group's borrowings and associated derivative contracts.

Where feasible, the group designates its financial instruments within fair value hedge relationships. In order to apply fair value hedge accounting, it must be demonstrated that there is an economic relationship between the borrowing instrument and the hedging derivative and that the designated hedge ratio is consistent with the group's risk management strategy.

Borrowings designated within a fair value hedge relationship

Where designated, bonds and loans are initially measured at fair value, being the cash proceeds received net of any direct issue costs. They are subsequently adjusted for any change in fair value attributable to the risk being hedged at each reporting date, with the change being charged or credited to finance expense in the income statement.

Hedge accounting is discontinued prospectively when the hedging instrument is sold, terminated or exercised, or where the hedge relationship no longer qualifies for hedge accounting.

Under the provisions of IFRS 9 'Financial Instruments', changes in the group's own credit risk are recognised in other comprehensive income.

Borrowings designated at fair value through profit or loss

Designation is made where the requirements to designate within a fair value hedge cannot be met at inception despite there being significant fair value offset between the borrowing and the hedging derivative. Where designated, bonds and loans are initially measured at fair value being the cash proceeds received and are subsequently measured at fair value at each reporting date, with changes in fair value being charged or credited to finance expense in the income statement.

Derivative financial instruments

The group's default treatment is that derivative financial instruments are measured at fair value at each reporting date, with changes in fair value being charged or credited to finance expense in the income statement. The group enters into financial derivatives contracts to manage its financial exposure to changes in market rates (see note A4).

Derivative financial instruments designated within a cash flow hedge relationship

Gains or losses resulting from the effective portion of the hedging instrument are recognised in other comprehensive income and in the cash flow hedge reserve with any remaining gains or losses recognised immediately in the income statement. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and cumulative change in fair value of the hedged item. At the maturity date, amounts paid/received are recognised against operating expenses in the income statement.

Upon discontinuation of a cash flow hedge, the amount accumulated in other comprehensive income remains in the cash flow hedge reserve if the hedged future cash flows are still expected to occur. Otherwise the amount is immediately reclassified to the income statement.

A7. Accounting policies (continued)

Derivatives and borrowings - valuation

Where an active market exists, designated borrowings and derivatives recorded at fair value are valued using quoted market prices. Otherwise, they are valued using a net present value valuation model. The model uses applicable interest rate curve data at each reporting date to determine any floating cash flows.

Projected future cash flows associated with each financial instrument are discounted to the reporting date using discount factors derived from the applicable interest curves adjusted for counterparty credit risk where appropriate. Discounted foreign currency cash flows are converted into sterling at the spot exchange rate at each reporting date. Assumptions are made with regard to credit spreads based on indicative pricing data.

The valuation of debt designated in a fair value hedge relationship is calculated based on the risk being hedged as prescribed by IFRS 9 'Financial Instruments'. The group's policy is to hedge its exposure to changes in the applicable underlying interest rate and it is this portion of the cash flows that is included in the valuation model (excluding any applicable company credit risk spread).

The valuation of debt designated at fair value through the profit or loss incorporates an assumed credit risk spread in the applicable discount factor. Credit spreads are determined based on indicative pricing data.

Inventories

Inventories are stated at the lower of cost and net realisable value. For properties held for resale, cost includes the cost of acquiring and developing the sites, including borrowing costs where applicable.

Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

Employee benefits

Retirement benefit obligations

The group operates two defined benefit pension schemes, which are independent of the group's finances, for its employees. Actuarial valuations to determine the funding of the schemes, along with future contribution rates, are carried out by the pension scheme actuary as directed by the trustees at intervals of not more than three years. In any intervening years, the trustees review the continuing appropriateness of the funding and contribution rates.

From a financial reporting perspective and in accordance with IAS 19 'Employee Benefits', defined benefit assets are measured at fair value while liabilities are measured at present value, using the projected unit credit method. The difference between the two amounts is recognised as a surplus or obligation in the statement of financial position. Where this difference results in a defined benefit surplus this is recognised in accordance with IFRIC 14 'IAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interaction' on the basis that the group has an unconditional right to a refund of any surplus that may exist following the full settlement of plan liabilities in a single event.

The pension cost under IAS 19 is assessed in accordance with the advice of a firm of actuaries based on the latest actuarial valuation and assumptions determined by the actuary, which are used to estimate the present value of defined benefit obligations. The assumptions are based on information supplied to the actuary by the company, supplemented by discussions between the actuary and management. The assumptions are disclosed in note A5.

The cost of providing pension benefits to employees relating to the current year's service (including curtailment gains and losses) is included within employee benefits expense, while the interest on the schemes' assets and liabilities is included within investment income and finance expense respectively.

A7. Accounting policies (continued)

Remeasurement gains/losses on scheme assets and liabilities are presented in other comprehensive income.

In addition, the group also operates a defined contribution pension section within the United Utilities Pension Scheme. Payments are charged as employee costs as they fall due. The group has no further payment obligations once the contributions have been paid.

Provisions

Provisions are recognised when the group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Expenditure that relates to an existing condition caused by past operations that does not contribute to current or future earnings is expensed.

Foreign currency translation

Transactions and balances

Transactions in foreign currencies are recorded at the exchange rates applicable on the dates of the transactions. At each reporting date, monetary assets and liabilities denominated in foreign currencies are translated into sterling at the relevant rates of exchange applicable on that date. Gains and losses arising on retranslation are included in net profit or loss for the period. In order to hedge its exposure to certain foreign exchange risks, the group enters into derivative instruments (see note A4).

Group companies

On consolidation, the statements of financial position of overseas subsidiaries and joint ventures (none of which has the currency of a hyperinflationary economy) are translated into sterling at exchange rates applicable at each reporting date. The income statements are translated into sterling using the average rate unless exchange rates fluctuate significantly, in which case the exchange rate at the date the transaction occurred is used. Exchange differences resulting from the translation of such statements of financial position at rates ruling at the beginning and end of the period, together with the differences between income statements translated at average rates and rates ruling at the period end, are dealt with as movements on the group's cumulative exchange reserve, a separate component of equity. Such translation differences are recognised as income or expense in the period in which the operation is disposed of.

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 rate. The group has elected to treat goodwill and fair value adjustments arising on acquisitions before the date of implementation of IFRS 3 'Business Combinations' (1 April 1999) as sterling denominated assets and liabilities.

Grants and contributions

Grants and contributions receivable in respect of property, plant and equipment are treated as deferred income, which is credited to the income statement over the estimated useful economic lives of the related assets.

Leases

At inception of a contract, the group assesses whether a contract is or contains a lease. Where a lease is present, a right-of-use asset and lease liability is recognised at the commencement date. The lease liability is measured at the present value of future lease payments due over the term of the lease, with the right-of-use asset recognised as property, plant and equipment at cost. This is generally equivalent to the initial measurement of the lease liability.

A7. Accounting policies (continued)

The group has elected to apply a practical expedient permitted by IFRS 16 whereby for the fixtures, fittings, tools and equipment asset class of leases the lease and non-lease components of the contracts are not separated, and instead are both accounted for as if they were a single lease component. Where non-lease components exist they are embedded within the lease payments, and the group deems that separation of such contracts into their constituent parts for this asset class would generally not be practicable nor have a material effect on the financial statements. IFRS 16 requires that where this practical expedient is applied, it is applied to the entire class of similar assets. The group has not applied this expedient to the remaining lease asset classes. Non-lease components include service charges, maintenance charges, and monitoring charges. For lease asset classes where the expedient has not been applied, non-lease components are excluded from the projection of future lease payments and are recorded separately within operating costs on a straight-line basis.

The lease payments are discounted using the group's incremental rate of borrowing if the interest rate implicit in the lease cannot be readily determined. For materially all of the group's leases, the group's incremental rate of borrowing is used. This rate is calculated using a number of inputs, being observable risk-free gilt rates, specific data based on bonds already in circulation for the relevant group company as well as data from the wider utility sector. Further adjustments for payment profile and the term of the lease are made.

After the commencement date, the lease liability is increased for the accretion of interest (being the unwinding of the discounting applied to future leases payments) and reduced by lease payments made. In addition to this, the carrying amount is updated to reflect any remeasurement or lease modifications. Remeasurements are typically required as a result of rent reviews or changes to the lease term. In these cases a corresponding adjustment to the right-of-use asset is made.

Depreciation of right-of-use assets is charged on a straight-line basis over the term of the lease. Lease payments are instead charged to the income statement on a straight-line basis over the period of the lease.

Where leases have a term of less than 12 months from the commencement date and do not have a purchase option, the group applies the short-term lease recognition exemption available under IFRS 16. The group applies the low value recognition exemption permitted by the standard to leases of assets with a value of less than £2,500. Payments for short-term and low value leases are instead charged to operating costs on a straight-line basis over the period of the lease.

Statement of cash flows

Grants and contributions received

Grants and contributions received arise from transactions with customers, typically property developers, that result in the expansion of the group's water and wastewater network and therefore its fixed asset base. Given that these grants and contributions are used to fund expenditure that results in the enhancement of the group's network assets, the cash inflows are classified within investing activities in the period.

Interest payments and receipts

IFRS allows interest payments and interest receipts to be classified within operating activities or financing activities/investing activities. The group classifies interest payments and interest receipts within operating activities, with management viewing these in conjunction with other operating cash flows in assessing the ability of the group to maintain its operating capability.

Support costs

Costs of time and resources incurred by the group's support functions that is capitalised in the period is included in purchase of property, plant and equipment within investing activities. These cash flows represent expenditures that have been made for resources intended to generate future income and cash flows, and the group deem these to therefore meet the definition of an investing activity.

A7. Accounting policies (continued)

Cash flows on derivatives

The cash flows on derivatives as a result of the group's hedging activities are presented together with the cash flows relating to the underlying hedged item to provide a more faithful representation of the substance of the transaction.

Taxes paid

Taxes paid by the group are presented as cash flows from operating activities. The group deem it impracticable to identify the tax cash flows with respect to individual transactions, which may themselves be presented in investing activities or financing activities, and instead present total tax cash flows as operating activities.

Dividend receipts

Dividends received from joint ventures have been presented in investing activities, with these cash receipts deemed to represent a return on investments previously made by the group.

Class of Droportion of

A8. Subsidiaries and other group undertakings

Details of the group's subsidiary undertakings, joint ventures and associates are set out below. Unless otherwise specified, the registered address for each entity is Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington WA5 3LP, United Kingdom. For further details of joint ventures and associates please see notes 11 and 12.

	Class of share capital	Proportion of share capital owned/voting	
	held	rights %	Nature of business
Subsidiary undertakings			
Great Britain			
Halkyn District Mines Drainage Company Limited*	Ordinary	99.9	Dormant
Lingley Mere Management Company Limited*	Ordinary	87.0	Property management
North West Water International Limited	Ordinary	100.0	Non-trading (formerly holding company)
North West Water Limited*	Ordinary	100.0	Dormant
United Utilities (Overseas Holdings) Limited*	Ordinary	100.0	Holding company
United Utilities Energy Limited	Ordinary	100.0	Energy generation
United Utilities Healthcare Trustee Limited	Ordinary	100.0	Corporate trustee
United Utilities International Limited	Ordinary	100.0	Consulting services and project management
United Utilities North West Limited	Ordinary	100.0	Holding company
United Utilities Pensions Trustees Limited	Ordinary	100.0	Corporate trustee
United Utilities Property Services Limited	Ordinary	100.0	Property management
United Utilities Renewable Energy Limited	Ordinary	100.0	Renewable energy generation
United Utilities Total Solutions Limited	Ordinary	100.0	Non-trading
United Utilities Utility Solutions (Industrial) Limited	Ordinary	100.0	Holding company
United Utilities Water Finance PLC*	Ordinary	100.0	Financing company
United Utilities Water Limited*	Ordinary	100.0	Water and wastewater services
UU (ESPS) Pensions Trustee Limited	Ordinary	100.0	Corporate trustee
UU Group Limited	Ordinary	100.0	Dormant
UU Secretariat Limited	Ordinary	100.0	Dormant
YCL Transport Limited	Ordinary	100.0	Non-trading
United Utilities Bioresources Limited	Ordinary	100.0	Wastewater services
The Netherlands			
United Utilities (Tallinn) BV ⁽¹⁾	Ordinary	100.0	Non-trading (formerly holding company)

Joint ventures - all joint ventures are accounted for using the equity method and are strategic to the group's activities to varying degrees.					
Lingley Mere Business Park Development Company Limited*	Ordinary	50.0	Development company		
Selectusonline Limited	Ordinary	16.7	Procurement portal		
Water Plus Group Limited ⁽²⁾	Ordinary	50.0	Holding company		
Water Plus Limited ⁽²⁾	Ordinary	50.0	Water and wastewater non-household retail eservices		
Water Plus Select Limited ⁽²⁾	Ordinary	50.0	Water and wastewater non-household retail services		

^{*}Shares are held by subsidiary undertakings rather than directly by United Utilities PLC.

Notes

⁽¹⁾ Registered address: Herikerbergweg 88, 1101 CM Amsterdam, the Netherlands.

⁽²⁾ Water Plus Limited and Water Plus Select Limited are wholly owned subsidiaries of Water Plus Group Limited. Registered address: Two Smithfield, Leonard Coates Way, Stoke-on-Trent, United Kingdom, ST1 4FD