Registered No: 2366616

United Utilities PLC

Annual Report and Financial Statements

31 March 2020

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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 financial 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 reflect knowledge and information available at the date of preparation of this financial report and the company undertakes no obligation to update these forward-looking statements. Nothing in this financial report should be construed as a profit forecast.

Certain regulatory performance data contained in this financial report is subject to regulatory audit.

Strategic report

Delivering our purpose

Our strategic themes define the way we operate in order to deliver our purpose and work towards our vision, and our core values provide the cultural framework within which we operate.

Our purpose

To provide great water and more for the North West.

Our vision

To be the best UK water and wastewater company.

Our strategic themes

- The best service to customers
- At the lowest sustainable cost
- In a responsible manner

Our core values

Customer focus

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

Innovation

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

Integrity

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

Trustworthy

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

Our strategy is broken down into three strategic themes, which form the framework for what we do.

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

In order to run a resilient business, it is important to ensure cost reductions are sustainable so that we can keep them down in the long term without compromising on resilience or the quality of service we deliver. When we develop our plans and assess different options for consideration, we look to minimise the whole-life cost through a holistic approach. 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 would otherwise not have been available.

In a responsible manner

Our purpose drives us to deliver our services in an environmentally sustainable, economically beneficial and socially responsible manner, looking after the interests of the stakeholders with whom we interact. 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.

These strategic themes run through everything we do.

Our operational performance measurement, key performance indicators, risk assessment and remuneration policy are all aligned to these three strategic themes.

Delivering our purpose

Providing great water means appreciating the circular nature of the water cycle and interacting with it in a responsible way.

Delivering clean water

We depend on water that we collect from the natural environment in rivers, lakes, open reservoirs and boreholes, but we need to do a lot of work before this water is safe and clean for customers to drink. We maintain covered reservoirs, water treatment works and thousands of kilometres of water pipes across the region in order to collect, treat, store and deliver billions of litres of reliable, clean drinking water to millions of customers 24 hours a day.

Removing wastewater

Once the water goes down customers’ drains, or surface water flows into the sewers, our job begins again as it requires separation and treatment before it is clean enough to return to the natural environment. We maintain wastewater treatment works and thousands of kilometres of wastewater pipes in order to collect, transport, treat and return water to begin the cycle again. We waste nothing, turning sludge by-product into compost for farmers and capturing gas to generate renewable energy.

Household retail

We deal with new connections, metering and billing for millions of household customers, and help vulnerable customers with our Priority Services and other assistance schemes.

Cleaning and returning wastewater

566 wastewater treatment works

7,000 kilometres of rivers

1,300 kilometres of coastline

Removing wastewater and generating energy

78,000 kilometres of wastewater pipes

196,000 tonnes of sewage sludge every year

37 renewable energy facilities

Collecting and treating water

56,000 hectares of land

166 reservoirs

86 water treatment works

Delivering water to customers

42,000 kilometres of water pipes

1.8 billion litres of clean water every day

7.3 million customers served 24 hours a day

We serve the North West of England

We are committed to understanding the key factors that make our region unique.

Economic factors

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

- **7.3 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 Lake District, Liverpool and coastal area

Social factors

We are leading the sector on affordability and vulnerability.

- **41 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
- **18 per cent** of households are affected by water poverty, **20 per cent** higher than the national average

Environmental factors

We have a large 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
- **29** designated bathing waters
- **830mm** higher than average UK rainfall each year

Delivering our purpose

Providing ‘more’ means creating value for our stakeholders. We actively engage with our different stakeholder groups in order to understand what matters most to them.

Identifying who our stakeholders are and engaging to understand what matters to them enables us to provide more for the North West and create long-term value for all.

We do not operate in isolation and it is not for us alone to determine what the region needs us to deliver. This is why it is essential we engage with stakeholders across the North West, so we can 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. These relationships are subject to robust governance to ensure the insights generated are taken into account in decision-making at executive and board level. This is important to building and maintaining trust. 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) regularly attends board meetings to provide its perspective.

The following pages 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 page 11.

There are eight key stakeholder groups that influence our planning and activities:

Influence what we do and benefit from the value we create:

- Communities
- Customers
- Employees
- Environment
- Suppliers

Influence what we do:

- Media
- Politicians
- Regulators

Our approach to engagement extends across all of our stakeholders.

Communities

Why we engage

Our work puts us at the heart of local communities: places where customers and employees live and work. We seek to develop strong relationships based on mutual trust, respect and an understanding of the impact our work has on everyday lives. We play a constructive role in tackling issues through engagement and investment, and by identifying what matters most to communities we can develop solutions in partnership.

How we engage

When communities come together, whether that is around a particular issue or location, they can often make powerful representations to the company. Much of this engagement is face to face, although social media and other digital communication is on the increase with online communities such as Watertalk, our online customer research panel.

We engage through facilitated workshops and community partnerships, such as those involving communities affected by the construction of the West Cumbria pipeline. Issues raised by communities can present opportunities to improve what we do to help others, while some can be complex and difficult to handle, especially where competing interests between different stakeholder groups are present, and require time and effort to work through.

Top three material issues

- Land management and access
- Community investment
- Trust, transparency and legitimacy

Customers

Why we engage

Serving over seven million people and 200,000 businesses in the North West means it's important we get our services right. But to deliver a great service in a way that customers value, we need to listen and engage with them in ways that are relevant. We know customer expectations are ever changing, and often more demanding, so we constantly look for ways to engage with, and understand, evolving customer expectations of us as their water company.

How we engage

We are always interested to hear what customers think about us and devote considerable time asking for, receiving and analysing customer feedback. We get this through everyday interactions, online customer panels and more detailed weekly research on key themes that are important to them. We have changed how we communicate and deliver services based on customer feedback, such as the introduction of Priority Services and our Instagram account. Our business plan for 2020–25 was shaped by unprecedented levels of customer engagement.

The independent customer challenge group, YourVoice, aims to ensure customers are at the heart of our business planning, and the Chair regularly attends our board meetings. YourVoice provides challenge and critical support on the delivery of commitments as well as contributing to the shape of future business plans.

Top three material issues

- Customer service and operational performance
- Affordability and vulnerability
- Leakage and water efficiency

Employees

Why we engage

Our employees are the face of the company and we could not deliver our services without them. It is essential we build productive relationships based on trust. We know that the more engaged, skilled and motivated our people are, the better service they provide to our customers, at a lesser cost. In addition to our own employees there are over 13,000 as part of our supply chain in the North West who are essential to our performance.

How we engage

Employees know our business better than anyone, with a diverse range of views and experience, making them well placed to identify opportunities for improvement.

We have a highly-engaged workforce who take pride in their work and value opportunities to learn new skills, and we maintain an open and honest dialogue between trade unions and the business. Line managers play a vital role in supporting employees, with regular one-to-one meetings, and our engagement survey now achieves UK high-performing norms. Our Employee Voice panel consists of 24 members from across the company providing a means by which employee perspectives are heard by the board. We have several employee-led networks such as LGBT and multi-cultural networks, an early careers board and we encourage employees to share innovative ideas via many forums.

Top three material issues

- Health, safety and wellbeing
- Diverse and skilled workforce
- Employee relations

Environment

Why we engage

We rely on the environment and play a key role in protecting and enhancing it across the North West. As the environment has no voice of its own, we engage with interested groups such as environmental regulators, non-governmental organisations, campaigners and local communities to find the best ways to tackle environmental issues, like climate change and reducing plastic pollution. We work with other water companies to collectively make a difference.

How we engage

The environment is one of our key resources so it is important for the sustainability of our business that we protect and enhance it. We conduct facilitated workshops with environmental stakeholders to understand their priorities and have undertaken a large number of customer research projects.

Environmental stakeholders tell us that working together is the best way to ensure resilience in the natural environment, especially where climate change is concerned. We work with environmental partners across the North West to identify new ways to deliver improvements, and engage with several groups to explore opportunities to deliver shared environmental outcomes.

Top three material issues

- Resilience
- Environmental impacts
- Climate change

Suppliers

Why we engage

Good relationships with suppliers help ensure projects are delivered on time, to good quality, at efficient costs, and can bring innovative approaches and solutions that create shared value. We work with around 2,500 suppliers to deliver our services, and the availability of goods and services in the market influences our strategy and how we operate.

How we engage

We rely on suppliers to deliver our services. We engage suppliers through workshops, including targeted sessions on innovation, and one-to-one feedback. Like-minded suppliers sign up to our sustainable supply chain charter and support the commitments set out within it, such as the commitment on human rights.

Feedback from suppliers revealed it can be difficult to access the company, especially when they have new products and services that could help us be more efficient and deliver better service. We established our Innovation Lab to help address this issue.

Top three material issues

- North west regional economy
- Responsible supply chain
- Human rights

Media

Why we engage

It is through both traditional media and social media platforms that many of our stakeholders receive their information about us and our activities. The media is influenced by the issues that matter to those stakeholders as well as influencing them through what it reports.

How we engage

Given the essential nature of our services, it is important that coverage is fair, balanced and accurate, and this requires effective two-way dialogue between the company and the media. This is achieved through proactive engagement by our media team, which is available 24/7, providing content to media outlets, as well as dedicated resources to drive proactive messaging on social media channels.

Top three material issues

- Political and regulatory environment
- Leakage and water efficiency
- Social media

Politicians

Why we engage

Politicians influence the long-term national water strategy and environmental priorities, matters that affect how all businesses operate, and champion issues raised by their constituents.

How we engage

We undertake direct engagement with national and local government, as well as elected representatives and devolved administrations on topics of public interest, helping us to understand their issues so we can seek solutions to shared environmental, social, economic and governance issues. We engage with regional and national politicians across the different political parties.

Top three material issues

- Political and regulatory environment
- Leakage and water efficiency
- Trust, transparency and legitimacy

Regulators

Why we engage

Through proactive, constructive engagement with economic, quality and environmental regulators, we agree to deliver commitments over specified time frames.

How we engage

We actively engage to shape the policy and regulatory framework within which we operate, covering customer, economic, environmental, social and governance matters. These priorities need to be balanced and viewed over a long-term horizon, and maintaining relationships is key to this. The priorities and objectives of regulators can change over time so active engagement to provide our perspective around future policy is important to us.

We hold regular meetings with all our regulators, including working on joint projects such as Natural Course, which aims to build capacity to protect and improve the North West water environment.

Top three material issues

- Political and regulatory environment
- Resilience
- Trust, transparency and legitimacy

Managing our material issues

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 on page 11.

This stakeholder materiality assessment informs decisions about what we report in documents such as this 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.

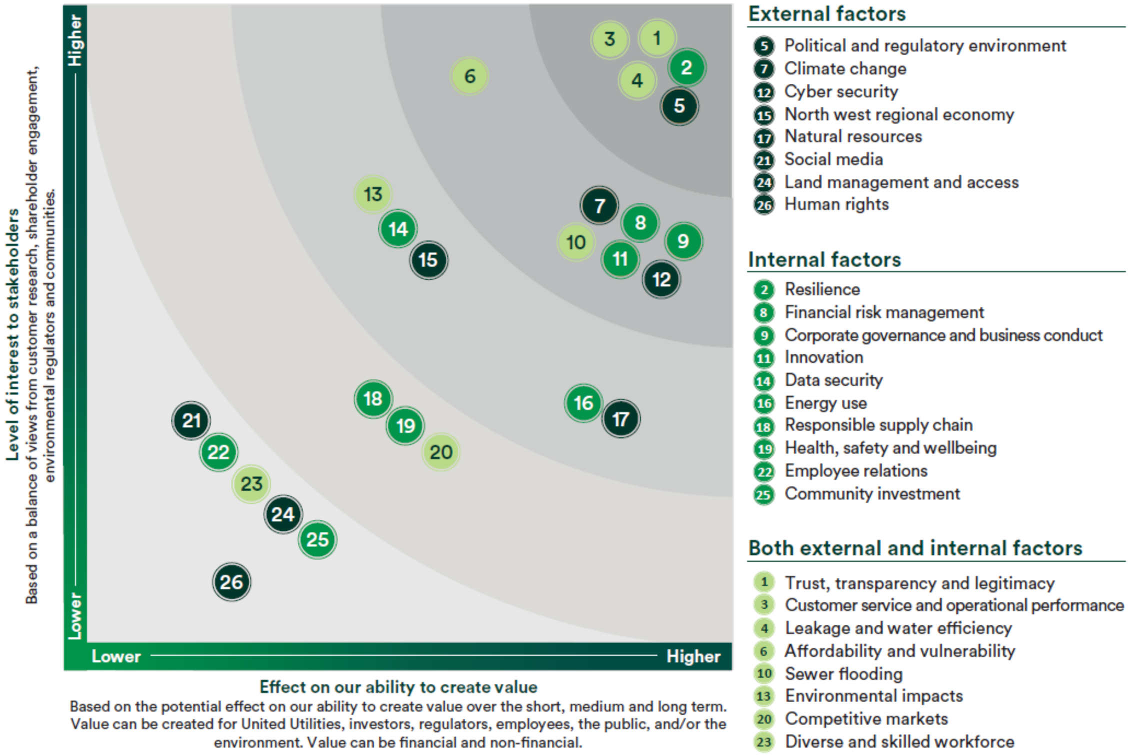
In defining the strategic relevance of an issue to the company, we have adopted the integrated reporting framework definition of materiality, which states: “a matter is material if it could substantively affect the organisation’s ability to create value in the short, medium or long term”. Value, in this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

Our assessment of the level of interest to stakeholders is based on a balance of views obtained from customers, regulators, communities, and subject matter experts from the company on an ongoing basis, as well as the extensive insights gathered for the regulatory price review process.

We have cross-referenced and aligned these issues with our principal risks and uncertainties, and our approach was reviewed by responsible business consultancy Corporate Citizenship, which commented that “alignment with United Utilities’ way of creating value gives life and credibility to the materiality matrix”, and this sends a very distinctive message about our business model and what we value.

Material issues matrix

We consolidated feedback from our various stakeholder groups, as detailed above, which resulted in 26 material issues. These issues are impacted by factors that may be external, internal or both; for example, affordability and vulnerability affect customers due to external social and economic factors, and the support services we provide for those customers are an internal factor, so this issue is impacted by both. The 26 issues are plotted on the matrix below, from lower to higher in terms of level of interest to stakeholders and how much it can affect our ability to create value.



Our business model

Our key resources

Natural resources

We rely on natural resources to supply water and take back wastewater after treatment, as well as to generate renewable energy. We own and manage large areas of land.

People

We rely on skilled and engaged employees and suppliers to deliver our services, and must ensure skills are maintained across the generations through training and development.

Assets

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

Financing

Financing allows us to preserve intergenerational equity for customers while funding long-term capital investment, and we maintain access to a range of markets to seek good value.

Our external drivers and relationships

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 security.

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

Regulators' priorities drive our five-year commitments, and we must actively engage to influence and prepare for future market reforms in the industry.

Political environment

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

Our strategy and core values

Our strategy sets out how we deliver our purpose, and is broken down into three strategic themes, which govern everything we do.

Our core values – to be customer-focused, innovative and trustworthy – provide the cultural framework within which we operate.

- The best service to customers
- At the lowest sustainable cost
- In a responsible manner

Our planning horizons

We undertake long, medium, and short-term planning, taking into account our external drivers and what matters to stakeholders.

1 year

We set annual targets but retain flexibility in these short-term targets to respond to challenges and meet our five-year goals in the most effective and efficient way possible.

5 years

Medium-term planning reflects our five-year regulatory periods, and aims to help us work towards our long-term plans.

25+ years

Our business is very long term by nature and we must build resilience to ensure we can continue to provide this essential service.

What we do

Our core activities are to deliver essential water and wastewater services for household and business customers across the North West of England.

We maintain and operate thousands of kilometres of pipes and hundreds of treatment works, as well as renewable energy facilities that use our land and bioresources from wastewater treatment to generate clean electricity to help power our operations.

How we do it

In order to deliver these essential services in the most effective way, we take an integrated approach that considers what is most material to our stakeholders and to our ability to create value; our risk management; our commitment to environmental, social and governance matters; and our pioneering Systems Thinking approach to operating our network and assets.

Our prioritisation of issues

We engage with our stakeholders to understand their priorities and balance their different and often conflicting views

Our commitment to ESG matters

We operate in an environmentally and socially conscious manner and uphold the highest standards of corporate governance

Our risk management

We manage a wide variety of risks to enable us to focus on delivering a sustainable and resilient service for the long-term

Systems Thinking

We operate our network as a system rather than discrete assets, and we have a backbone of sensors that enable remote monitoring and control

The value we generate

Employees

We focus on attracting, developing and retaining a diverse workforce, and ensuring we look after their health, safety and wellbeing. We run graduate and apprenticeship programmes, and encourage younger students to pursue science, technology, engineering and mathematics careers, to help ensure the next generation of skilled employees.

How we measure this

- Engagement score, diversity and gender pay, training and development, accident frequency, and pensions

Communities

We build partnerships and work with schools in our region to develop skills and help people get back to work. We encourage employee volunteering programmes to help create better places, stronger communities, and accomplish more to address local issues together.

How we measure this

- KPI – DJSI rating
- Other metrics including charitable donations, community funding, and employee volunteering

Customers

We put customers at the heart of everything we do. Through innovation and efficiency we provide a continually improving service at an efficient low cost, and we support thousands of vulnerable customers through a wide range of assistance schemes.

How we measure this

- KPI – Wholesale ODI composite

- KPI – SIM qualitative
- KPI – SIM quantitative
- Other metrics including complaints, digital services, assistance schemes, and water efficiency savings

Environment

We maintain and enhance reservoirs, catchment land, rivers and bathing waters that provide a home for wildlife, areas for recreation, and a major pull for tourism. We strive to reduce our environmental impact and generate renewable energy.

How we measure this

- KPI – Leakage
- KPI – EA performance assessment
- KPI – DJSI rating
- Other metrics including carbon footprint, waste to beneficial use, and natural capital value added

Suppliers

We invest in the North West's infrastructure and generate jobs, skills and income across the region through our capital programme that supports the supply chain and our local economy. We act fairly and transparently with all our suppliers and are a signatory to the Prompt Payment Code.

How we measure this

- Metrics such as average time taken to pay invoices, and proportion of suppliers paid on time

Our key resources

Natural resources

We rely on natural sources of water such as reservoirs, rivers and boreholes, from which abstraction licences permit us to take water in a safe and sustainable way to be treated and supplied to customers. We rely on natural watercourses to take wastewater back into the environment after extensive cleaning. We generate renewable energy from the sun and wind, and extract bioresources from wastewater that we break down into biogas (which is used to generate renewable energy) and biosolids (which are treated to provide a high-quality fertiliser for farmers).

Coping with severe dry periods requires action in relation to supply (ensuring we have resilient water resources and infrastructure to move water efficiently around the region) and demand (encouraging and supporting customers to use water more efficiently). In periods of heavy rainfall we need to deal with excess surface water drainage and minimise the risk of sewer flooding, pollution and spills.

How we manage this key resource

Much of the water we abstract originates on land before running off into the bodies of water. We own and manage large areas of this land, much of which is managed by tenant farmers, or in partnership with other organisations such as the RSPB and Wildlife Trusts, and we focus on ensuring it is well managed to improve water quality and help protect habitats and species that live there.

Our Systems Thinking approach is central to how we manage water supply. We have an integrated supply zone covering most of our region, our West-East Link Main allows us to transfer water between Manchester and Liverpool, and where there is a potential shortfall we can bring more supplies online to meet demand. 46 per cent of households in our region now have water meters installed, and we encourage customers to save water by raising awareness, sharing tips, and providing free water-saving devices.

Traditional interventions to flooding, such as storage tanks and enlarging sewers, are costly and subject to space constraints. We are innovating with new sustainable drainage solutions by working with partners to transform hard grey areas into living planted places. We use integrated catchment solutions, working with others to improve the lakes, rivers and coastal waters in our region, and often using the natural environment as part of the solution. We manage our own woodland in a sustainable way to protect water quality, conservation, access, recreation and timber.

Our activities produce various wastes, including sludges, which we manage in a sustainable way with less than 2 per cent going to landfill. We use recycled products where practical, and are working to reduce our use of plastics and raw materials to minimise our environmental impact.

People

Our people are the face of our company and essential in delivering our purpose. We believe the most effective decision-making comes from a diverse range of people who feel encouraged to share their views, and that having a skilled, engaged and motivated team of employees, suppliers and contractors is fundamental to the performance we deliver.

Rewarding employees well has been shown to enhance quality of work, increase employee retention, and reduce absenteeism, as well as providing societal benefits. Employee retention helps ensure efficient and effective training and higher levels of performance.

How we manage this key resource

We support thousands of jobs in the North West, including graduate and apprenticeship programmes, helping to secure a legacy for the future in our region. We are committed to paying our suppliers on time and are a signatory to the Prompt Payment Code, and we provide our employees with competitive wages and benefits, an attractive pension offering, and the opportunity to join the employee healthcare scheme and our share incentive plan.

We provide comprehensive training and development opportunities, including digital skills to help with our Systems Thinking approach and enable remote working where practical, which has become more important this year with restrictions during the COVID-19 pandemic.

We promote diversity and equal opportunity to drive a comprehensive and balanced skill set, and we recruit and promote employees on the basis of merit.. We are committed to protecting the health, safety and wellbeing of our people, and have been awarded the workplace wellbeing charter.

We measure employee engagement through an annual survey, and regularly achieve results higher than the UK norm. We monitor and measure employee performance through annual reviews, and employees at all levels of the company participate in the bonus scheme, so they benefit from company success. The bonus performance measures are the same for all employees as those for the executive directors.

Assets

Our network assets and treatment works are essential to delivering our services for customers and protecting public health, and our energy assets enable us to generate renewable energy, which helps reduce costs and minimise our environmental impact. It is important we have the right systems and procedures in place to monitor and control our assets efficiently and effectively.

Many of our assets are very long term in nature, such as our impounding reservoirs that can last hundreds of years. We must invest to maintain these assets in good condition so they can continue to provide for customers in the long term. We need to make improvements to ensure we can meet the needs of a growing population, and increasingly high quality standards and tighter environmental consents driven by our quality and environmental regulators.

How we manage this key resource

Since privatisation the significant investment we have made in our assets has provided substantial benefits to customers, including reduced supply interruptions, reduced sewer flooding incidents, and improved water quality, and we expect to continue with a substantial investment programme for the foreseeable future as current environmental legislation requires continued investment. We plan for the long term to help us understand where and when we need to invest in our assets, and we monitor the condition, performance and health of our assets.

We manage our assets in a holistic way that seeks to minimise whole life costs, and we embrace new technology and innovation, which is at the heart of our Systems Thinking approach. This helps us deliver efficient total expenditure (totex) without compromising on quality of service or long-term resilience, saving future operating costs and reducing future customer bills.

We saw in AMP6 the benefit of accelerating our investment to deliver improvements sooner, and we plan to take the same approach in AMP7, bringing forward some of our capital spend earlier in the five-year period. During the COVID-19 pandemic, we have halted non-essential work but we are continuing with construction projects where we are able to do so safely for our employees and others that they are in contact with.

Our assets and infrastructure projects can affect people who live nearby. We consult with these communities in the planning stage and work hard to minimise odours from our wastewater treatment works and other impacts.

Financing

As a result of the long-term nature of our assets and the need to spread the cost between the generations of customers that benefit from them, it is necessary to raise financing in order to fund investment in building, maintaining and improving our assets, networks and services.

It is important that we are able to raise finance when needed to preserve adequate liquidity, and that we manage financial risks such as our exposure to movements in interest rates and inflation, to ensure we maintain long-term financial resilience.

How we manage this key resource

We maintain a robust capital structure, with a responsible mix of equity and debt financing. We monitor our performance against required thresholds for key credit ratios to help us maintain strong and stable investment grade credit ratings. This gives us efficient access to debt capital markets across the economic cycle.

We maintain relationships with a diverse range of banks and access to a broad and diverse range of sources of financing in a number of markets, across which we seek the best relative value when issuing new debt. We periodically refresh our EMTN programme to enable efficient debt issuance under pre-agreed contractual terms, and the board delegates authority to the CFO, allowing us to respond quickly to attractive financing opportunities. This helps us to consistently raise efficient financing at a cost cheaper than many of our peers.

We aim to avoid a concentration of refinancing in any one year, and fund long term where possible. Our debt portfolio has a very long average life, and we monitor liquidity forecasts with a policy of having resources available to cover the next 15–24 months of projected cash flows to ensure forward funding needs are met.

We have clear and transparent hedging policies covering credit, liquidity, interest rate, inflation and currency risk, and these are aligned with the regulatory model.

Our prudent approach to managing financial risks is one of our competitive advantages.

Our external drivers and relationships

The way we work is impacted by a number of factors external to our business that we must consider and manage.

Natural environment

The natural environment is constantly changing, and we must adapt and prepare for future impacts such as climate change and population growth. We can help mitigate climate change by minimising our own emissions and environmental impact. Our use and return of water to the environment is a continuous cycle, and returning water cleanly and safely, as well as managing our catchment land effectively, allows this cycle to begin again from the best starting point.

Stakeholders

The nature of our work means we are at the heart of communities in our region, and have an impact on a large variety of stakeholders. We own and manage huge areas of land in areas of natural beauty that are valued by locals and tourists alike. It is important, therefore, that we give consideration to what matters to those stakeholders, and we build relationships and consult with them in developing and executing our plans.

Technology and innovation

New technologies and innovative ideas present opportunities for us to make things faster, better, safer and cheaper. These can come from a huge variety of places – across different industries and different countries as well as ideas from within our business. We encourage innovation externally and internally at all levels of the business, from our annual CEO Challenge and dedicated innovation team to our Innovation Lab. As well as opportunities, technology can create risks, and this is why our approach to cyber security is so important.

Economic environment

We are impacted by market rate movements, such as interest rates and inflation, but we seek to manage these prudently to reduce risk as far as practical. As well as these direct impacts on the company, the economic climate impacts our customers and their ability to pay their bills. We operate in an area with high levels of extreme deprivation, so helping vulnerable customers is particularly important for us.

Regulatory environment

Sustainable business means preparing for future market reforms as well as meeting current regulatory commitments. We place great value on our relationships with economic, quality and environmental regulators. We engage actively and regularly, both on progress with our ongoing plans, and on consultations for future reforms where we offer our views and influence where we can.

Political environment

Political decisions have the potential to significantly impact on our operations. As a responsible business, we ensure that we abide by the directions set by government, and stay flexible to adapt according to political and policy developments. Therefore, we engage closely with politicians and other policymakers from the government and other parties on a constituency, regional and national level, to understand the development of policy which will affect our business, and to communicate the economic, social and environmental value that United Utilities delivers in the North West, and the UK as a whole.

To provide great water and more for the North West we must first consider our economic, quality and environmental regulation, and the particular characteristics of our region.

Our industry and market

Customers in England and Wales are served by 11 licensed water and wastewater companies and smaller companies providing water-only services. Our regulated entity, United Utilities Water Limited (‘UUW’), is the second largest, based on the size of our Regulatory Capital Value (RCV). 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. As a monopoly provider of essential services, we are regulated by various bodies as set out below.

Our economic regulator (Ofwat) sets the price, service and incentive package that companies must deliver in five-year periods, known as Asset Management Plan periods (AMPs). These packages are based on Ofwat’s methodology and priorities, and consideration and scrutiny of company business plans. We must therefore engage constructively with Ofwat on its future priorities and methodology consultations, 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 final year of AMP6 and we have accepted the final determination for AMP7, covering the 2020–25 period.

Our focus is now on delivering and trying to outperform our final determination through:

- Spending less than our total expenditure (totex) allowance through innovation and efficiency;
- Beating the Outcome Delivery Incentive (ODI) targets for operational performance;
- Delivering higher customer satisfaction than the other companies in our industry; and
- Raising debt finance at a cost below the industry allowed cost of debt.

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 has allowed a further £51 billion across the industry to deliver even more improvements.

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. The latter two, which were in place at the start of AMP6, are included in our operational key performance indicators (KPIs). Our vision is to be the best UK water and wastewater company, so we regularly benchmark our performance against these peers. As well as assessment against our water peers, we benchmark our customer service performance against other leading service providers in our region.

Our regulators

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

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 timeframe 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.

How we plan for the future

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

Our approach to planning

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

- What the material issues are, to stakeholders and to 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, so we can ensure resilience in order to continue to fulfil our purpose.

These long-term plans influence our medium-term (five 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, such as renewable energy.

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.

Our planning horizons

1 year

We set annual targets but retain flexibility in these short-term targets to respond to challenges and meet our five-year goals in the most effective and efficient way possible.

5 years

Medium-term planning reflects our five-year regulatory periods, and aims to help us work towards our long-term plans.

25+ years

Our business is very long term by nature and we must build resilience to ensure we can continue to provide this essential service.

Long-term planning (25+ years)

In order 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 in certain areas, 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 our risk management process.

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;
- The UK's exit from the European Union;
- A more open, competitive market;
- 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 the challenges ahead and how we will focus our resources and talents in order to meet them.

This includes our 25-year Water Resources Management Plan (WRMP) covering the 2020–45 period, which was developed and published in 2019 following consultation with stakeholders, and our drought plan, which was published in 2018 with an amendment appendix in 2018/19. 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, and the actions we will take to manage the risk of a drought.

We create long-term value for stakeholders by:

- Systems Thinking and innovation;
- Long-term planning and responding to challenges and opportunities, including management of water resources;
- 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.

2022

We will extend our integrated water supply network into West Cumbria

2025

We aim to lift 66,500 more customers out of water poverty through financial assistance

2025+

We will work to enable future national water trading

2030

We will work with others to achieve ‘Blue Flag’ beaches along our coastline

2045

We will install additional water meters to achieve coverage of around 75 per cent of households

2045

We aim to reduce leakage by over 40 per cent

Our five-year plans centre around regulatory targets. We set one-year targets but maintain flexibility in these to adapt to meet challenges that arise in the year.

Medium-term planning (5 years)

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.

It is important that our ambitions align with those of our regulator, therefore we carefully evaluate all consultation and methodology publications from Ofwat and engage with them to put forward our views and help ensure a balanced approach that creates value for all stakeholders.

The business plans we submit for each five-year period 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 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 (expressed as a percentage of Regulatory Capital Value).

When we receive the FD, we refine our company business plan for any changes, such as in allowed expenditure or performance level targets, and we must decide whether to accept the FD.

The improvements we delivered in operational performance, efficiency, bad debts and cash collection over the 2015–20 period helped us put forward efficient totex proposals in our business plan for 2020–25, and this was reflected in Ofwat's assessment in which we were awarded fast-track status and given one of the lowest cost challenges in the sector. This gave us time to get a flying start on our plans for 2020–25. We accepted the FD in January 2020 and are well prepared for this next period, having invested £100 million over 2019/20 to accelerate planned improvements and achieve a flying start.

Our strategy of delivering the best service to customers at the lowest sustainable cost in a responsible manner 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 is made up of the base allowed return and any outperformance/underperformance, on an annual and cumulative basis for each five-year period.

Short-term planning (1 year)

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, we develop a business plan for that year, which is reviewed and approved by the board. This sets our annual targets, designed to help deliver further improvements in service delivery and efficiency, and to help move us towards achievement of our five-year goals. Performance against these annual targets determines annual bonuses for executive directors and employees right through the organisation, who are remunerated against the same bonus targets as the executive team.

To avoid short-term decision-making and ensure management is focused on the long-term performance of the company, as well as these annual targets executive directors are remunerated through long-term incentive plans that assess three-year performance, measured during the current period through total shareholder return, sustainable dividends and customer service.

The executive directors hold quarterly business review meetings with senior managers across the business to monitor and assess our 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 and its impacts in the latter part of this financial year and continuing into 2020/21 are 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 are critical for public health at this time.

Our approach to resilience

In its initial assessment of our business plan for 2020–25, Ofwat commended our approach to resilience as sector leading.

Innovation is a critical enabler for resilience, and our Systems Thinking approach gives us an advantage. Sensors across our network and remote monitoring and control from the Integrated Control Centre at head office allow us to spot issues and respond proactively before customers are impacted and/or the issue becomes more serious. For example, spotting changes in pressure in the network to identify issues so that we can send a team out to repair them before customers are affected.

As well as our use of innovation, we have enhanced our approach to resilience through lessons learned from previous events. We introduced new incident management procedures with detailed contingency plans and a director-led incident review board in response to events in 2015 and 2016. Another development in our approach as a result of lessons learned was the introduction of Priority Services, which offers tailored support to the more vulnerable members of society in emergencies.

Operational resilience

The main risks to the resilience of our operational assets are the potential for failure of ageing infrastructure and the challenges presented by climate change and population growth forecasts.

Our 2019 Water Resources Management Plan considered a range of future challenges, including:

- Extreme drought, freeze-thaw, and flooding;
- Climate change (100 scenarios under the latest UK climate projections (UKCP09) at the time of creating the plan); and
- Demand (population growth, economic trends and patterns of water use).

We assessed risks over the 2020–45 planning period and looked beyond this into the 2080s. We published two adaptation reports, in 2011 and 2015, which outline our holistic, integrated and partnership approach to a range of short and long-term challenges, including a changing climate.

Our plans for 2020–25 include engaging with suppliers on a Direct Procurement for Customers (DPC) project to address our biggest operational asset risk: the Haweswater Aqueduct.

Skills resilience

We have some key highly skilled roles, and our talent succession pipeline is critical to the seamless transfer of skills from one generation to another.

We have active graduate and apprenticeship programmes, we have partnered with Teach First, and we are an active participant in the STEM (science, technology, engineering and mathematics) programme encouraging the younger generation to study and pursue careers in these fields.

Corporate and financial resilience

As part of a publicly listed group, we consistently adhere to the highest levels of governance, accountability and transparency.

Long-term financial resilience starts with a strong and robust balance sheet and a prudent risk management approach, and we believe we are at the frontier in this respect. We have maintained a responsible level of gearing and well-controlled pension position for many years, and our prudent financial risk management is one of our competitive advantages.

Our plans for 2020–25

What we plan to deliver in AMP7

Our business plan was shaped by what matters to stakeholders

In preparing our business plan, we undertook our most extensive ever engagement campaign, reaching 1.7 million people and asking over 140,000 customers and stakeholders across our region for their views on what matters most to them.

The feedback was very clear – stakeholders wanted lower bills, improved services (including extra support for those customers in vulnerable circumstances), and a commitment to continue to protect the environment in the region. This feedback was fundamental in shaping our proposals.

We have made a flying start to our plans for the 2020–25 period (AMP7)

Fast-track status allowed us to start early with our delivery plans. We have tendered and selected our two delivery partners for the period and awarded contracts for the first tranche of our capital programme, getting us ahead of the curve and giving our partners time to start the design stage.

We reinvested £350 million of outperformance earned over the 2015–20 period, with £250 million targeted to increase our resilience, and £100 million invested in 2019/20 to give us a flying start to the 2020–25 period. We have used this to improve performance sooner in areas with the most challenging outcome delivery incentive (ODI) targets such as leakage, supply interruptions and sewer flooding. This means we will start the period in a stronger position.

We will deliver further improvements and share our success

We are targeting stretching service levels for customers and the environment, and aim to support even greater numbers of vulnerable customers, while average bills are predicted to fall in real terms.

We are committed to sharing success with customers, who will receive matching benefits if outperformance leads to dividends that are much higher than proposed in our business plan, consistent with our responsible approach over the last ten years, during which we have voluntarily shared over £600 million of our delivered outperformance.

Delivering a better service and real bill reductions

Key deliverables:

- 13.8 per cent real reduction in average customer bills over 2020–25 in the final determination
- Targeting 34 per cent reduction in customer contacts about water quality and 58 per cent reduction in supply interruptions

Our 46 performance commitments contain a broad spectrum of areas in which we are targeting further improvements for customers and the environment in 2020–25. We aim to reduce the number of customer contacts about taste and smell and the number of supply interruptions, all at an efficient cost with the help of our Systems Thinking approach and innovation culture. As a result, the average customer bill is expected to reduce in real terms over the period, on top of the 10 per cent real bill reductions we have already delivered since 2010.

Helping vulnerable customers

Key deliverables:

- Committed £71 million voluntary funding to provide financial assistance for customers
- Targeting to help 66,500 customers out of water poverty through financial assistance
- One of the first water companies to achieve BSI accreditation for Priority Services

In its initial assessment Ofwat commended our plan for including "ambitious, innovative and sector-leading proposals to make customers' bills affordable and on providing support for vulnerable customers". This is particularly important in our region, which has high levels of extreme deprivation. Our planned bill reductions will help customers struggling financially, and on top of this we are aiming to lift thousands out of water poverty through financial assistance, and have committed £71 million voluntary funding into our CommUnity Share scheme to provide help for customers who need it. We lead the sector with over 100,000 customers now registered for Priority Services, and this year we became one of the first water companies to achieve British Standards Institution (BSI) accreditation for this, in line with the common ODI target for 2020–25.

Driving further environmental improvements

Key deliverables:

- Targeting 20 per cent reduction in pollution and 15 per cent reduction in leakage
- Committed to targets for improving water quality in the natural environment, and a unique commitment to enhance natural capital value

Our targets for 2020–25 include stretching performance improvements for the environment, with significant reductions in pollution and leakage. We have committed to targets for improving water and air quality, reducing the risk of sewer flooding, and protecting the environment from the impact of growth and new development. Our unique natural capital ODI incentivises us to create added value for stakeholders by using non-conventional catchment solutions to deliver water quality improvements through natural capital approaches and assets.

Efficient total expenditure (totex) proposals

Key deliverables:

- £5.8 billion net totex allowance
- We exit this year at the required run rate for our totex allowance for the 2020–25 period
- 50:50 customer cost sharing rates for out/under-performance on totex

We submitted efficient totex proposals in our business plan, as reflected in Ofwat's assessment in which we were given one of the lowest cost challenges in the sector. The sustainable savings we have delivered in the 2015–20 period give us confidence in our ability to deliver, and we exit the current period at the required totex run rate. In the areas where out/under-performance against our totex allowance is shared with customers, our fast-track status means we benefit from more favourable cost-sharing rates than many of our peers. Our totex allowance includes £57 million for preparatory work needed to progress with our Haweswater Aqueduct Resilience Programme through Direct Procurement for Customers and £44 million for strategic water resource development.

Opportunities represented by our ODIs

Key deliverables:

- More balance in our ODI outperformance payment/penalty ranges compared with the 2015–20 period
- Range of 1.5 per cent reward to 1.8 per cent penalty (as a percentage of regulated equity) set out in the final determination
- £100 million flying start investment improves our most likely performance

We have 46 performance commitments for the 2020–25 period, including seven that are comparable with the same targets set across the industry, five common commitments that have company-specific targets, 27 bespoke commitments with financial incentives, and seven that are purely reputational. The likely range of possible outcomes presented by Ofwat in the final determination equates to a total over the 2020–25 period of between £337 million outperformance payment and £387 million penalty on ODIs, including C-MeX and D-MeX. However, our projected performance has been improved by the reinvestment of £100 million of earned outperformance during AMP6, targeted at improving performance against our three most challenging targets – sewer flooding, leakage and supply interruptions. Outperformance payment and/or penalties against ODIs in AMP7 will be applied as an adjustment to revenues on a two-year lag basis.

Sharing our success with customers

Key deliverables:

- Customers will receive matching benefits where outperformance leads to dividends that are much higher than proposed in our business plan
- Consistent with our responsible approach over the last ten years

Over the last two regulatory periods (2010–15 and 2015–20) we have voluntarily shared over £600 million with customers from the outperformance we have delivered, as part of being a responsible business. For the 2020–25 period we will continue to share our success with customers, and have committed to this upfront. If dividends are much higher than proposed in our business plan, through us earning and distributing additional outperformance over the period, customers will receive matching benefits through us making further contributions to the CommUnity Share scheme (in addition to the £71 million voluntary contribution we have already committed to). We will consult with customers and shareholders, overseen by the independent customer challenge group, YourVoice, to determine the best use for any additional funding.

How we create value for stakeholders

Communities

Short-term

- We look after beautiful landscapes and beaches and open our land to the public, which supports the regional tourism industry and offers communities health and wellbeing benefits through access to relaxation and recreation.
- We encourage employees to volunteer on projects that address local issues, helping to create better places and stronger communities.
- Working in partnership with others means we can accomplish more together to tackle mutual issues, such as partnering to develop employability skills for those who need it most.

Long-term

- The health and wellbeing benefits through our provision of access to nature for recreation and relaxation helps reduce the burden on health services.
- Managing land responsibly means we leave the north west environment in a better condition for future generations.
- We work with teachers and children to raise awareness about water and the natural environment, giving the next generation an understanding of the true value water brings and how we can all play our part in protecting the services nature provides.

Link to strategic themes

Promoting our support services and campaign messages places us at the heart of communities and builds trust with hard to reach groups.

By working with community partners we can share resources, access new funding opportunities and achieve more together.

Providing access to our land enables communities to enjoy the physical and mental wellbeing benefits that green spaces can bring.

Customers

Short-term

- We focus on delivering a reliable service so customers can simply get on with their lives and not have to worry about their water and wastewater services.
- When they do need to contact us, we provide a helpful service, talking and listening to customers so we can understand and meet their expectations.
- We maintain bills that are good value for money through innovation and efficiency.
- Where customers are struggling with affordability and vulnerability, we provide tailored support through Priority Services and payment assistance schemes.

Long-term

- Our water and wastewater services make a major contribution to the long-term health and wellbeing of customers in the North West.
- Through long-term financing and the regulatory framework, we are delivering multi-million pound infrastructure projects to improve services and resilience for the long term. We ensure the cost of this is shared fairly and affordably between those that benefit now and in the future.
- We focus on earning the trust of customers, for example by keeping personal details safe and through transparent reporting, to ensure they can have complete peace of mind.

Link to strategic themes

We will continue to invest in our assets and people over the next five years to meet stretching targets customers support.

By achieving sustainable cost reductions we can provide an efficient service, keeping bills low and maintaining good value for money.

We provide assistance schemes to those who need it most and provide practical advice on how to manage water in the home.

Employees

Short-term

- We have a strong focus on health, safety and wellbeing. We firmly believe that nothing we do is worth getting hurt for, and we aim to ensure all employees go home safe and well at the end of the day.
- We invest in training and development to enable our employees to grow their skills and to help keep them motivated.
- Listening to our employees helps create an engaged workforce, increasing job satisfaction, and through employee communications and conferences we update our people on business developments so they feel part of a team.

Long-term

- Investing in the development of current, and future employees, means we will have a workforce with the right skills for the future.
- Health, safety and wellbeing extends to mental as well as physical health. We promote awareness of stress and other mental health issues, promoting an all-round healthy lifestyle in the long term which, in turn, reduces the burden on health care services.
- We provide pension offerings that support employees in later life.

Link to strategic themes

Improving our performance creates employee pride in a job well done, enhancing employee satisfaction and a desire to do more.

Encouraging innovative ideas from employees can lead to cost reductions, and improving employee satisfaction reduces turnover which ensures training and development costs are efficient.

We take a responsible approach to protecting the health, safety and wellbeing of our employees, ensuring we send everyone home each day safe and well.

Environment

Short-term

- We meet increasingly stringent environmental consent levels, which help to improve the quality of rivers and bathing waters and so support tourism in the region.
- Our investment in renewable energy generation is reducing our carbon footprint and contribution to climate change.
- We have invested in new infrastructure, such as our West Cumbria project, to allow us to transfer water around the region more efficiently to avoid depletion of individual water sources.

Long-term

- By promoting campaigns to educate the public and younger generations on water usage, it helps protect this valuable resource and reduce usage now and for years to come.
- We innovate and invest in new technologies to solve environmental challenges for future generations.
- We manage our land in a way that safeguards habitats for indigenous wildlife, as well as protecting wildlife that makes its home in rivers and other water bodies.
- We plan far ahead to ensure our activities and investment enhance the long-term resilience of the environment.

Link to strategic themes

Many customers care about the environment so providing the best service to customers involves protecting the places they live in and love.

Many ways we protect the environment reduce cost; for example, renewable energy generation reduces our energy costs as well as our carbon footprint.

We manage water and wastewater in a responsible way that protects the environment and enhances its resilience.

Suppliers

Short-term

- We spend significant amounts of money with our suppliers each year to help deliver maintenance and enhancement projects across our asset base, and this helps support thousands of jobs in our region.
- By investing in our infrastructure we are helping to keep the economy flowing. We generate thousands of jobs through our capital programme and provide income for workers in the region.
- While our operations and suppliers are mainly UK and European, they work closely with us to address human rights; in particular, modern slavery.

Long-term

- Supporting jobs through our supply chain in the short term catalyses the development of skills and jobs in the North West, providing a stimulus to benefit the regional economy in the long term.
- Working together to develop innovations and new technologies means we can identify solutions that will make our services better in the future.
- We act with integrity, giving suppliers confidence in the way we do business, which translates to transparency and fairness for our suppliers.

Link to strategic themes

Working on our behalf, suppliers are a face for our business. Ensuring they are motivated to deliver good quality work helps us deliver the best service to customers.

Developing innovations with suppliers, and ensuring they deliver goods and services efficiently, contributes to a sustainably low cost for customers.

Working with responsible suppliers who share our sustainability objectives helps us achieve more in tackling environmental and social issues.

How we respond to challenges

Challenge: Delivering a reliable service in a changing world

In an increasingly digital and instant economy, customers expect more from services now than ever before. This includes the water sector, with high expectations not just for the reliability of services but the water we supply and the assets we operate. Many of our assets are ageing compared to other utilities. In order to meet the expectations of customers and regulators, it is critical that we combine modern technology into our networks and management of customer service. Quick response to issues raised by stakeholders, often through digital means such as social media, is part of this growing expectation.

Ensuring a reliable service in the face of a growing population, changing climate and increasing expectations of service requires integrated long-term thinking and targeting investment to ensure both short and longer-term reliability.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Resilience
- Innovation
- Customer service and operational performance

How we respond

Our culture of innovation and Systems Thinking approach drive us to adapt our assets and the way we operate to use modern technology and the best new ways of working. Examples include sensors across our network that allow remote monitoring and control from our integrated control centre, and our fleet of alternative supply vehicles (ASVs) that can inject treated water directly into supply while we undertake repairs. We have a substantially enhanced social media presence to respond quickly to stakeholders.

During the year we needed to react quickly to repair a pipeline damaged by severe flooding during Storm Ciara, which was further impacted by the remote location of the pipeline and adverse weather conditions. Co-ordinating the incident through our Integrated Control Centre we were able to mobilise our fleet of ASVs to keep customers supplied during the repair and ensure regular communications with our customers.

The availability of regional water supply was also impacted during the year by restricted production capacity at our Oswestry water treatment works due to ongoing work trialling a potential solution to a water discolouration issue.

Link to strategic themes

We are installing over 100,000 sensors across our networks to proactively manage issues and sort them before customers are impacted.

We balance our capital and maintenance expenditure to ensure affordability and reliability over the short, medium and long term.

We are targeting a 15 per cent reduction in leakage over the 2020–25 period to further protect the reliability of service and water resources.

Our future plans

We have a number of challenging targets for the 2020–25 period that will help improve the reliability of our service, including helping and encouraging customers to use less water. Further deployment of Systems Thinking will deliver further improvements in the reliability of services.

Challenge: Securing long-term operational resilience

It is vital to our operational resilience that we have plans in place to manage future challenges and maintain the provision of our essential services to customers. Our assets must be prepared to cope with a growing population, and comply with increasingly challenging environmental constraints in areas such as water abstraction and wastewater treatment levels. We must build increased resilience to cope with the anticipated impacts of a changing climate in the long term, including improvements to flood defences.

Balancing the risk of service interruptions against investment for the future is a constant challenge for water companies. Understanding what matters to stakeholders to plan our investment programme requires in-depth engagement and analysis, especially in the context of longer-term challenges that span more than five years.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Resilience
- Customer service and operational performance

How we respond

It can take many years and require substantial investment to increase the resilience of existing assets or build new ones, which is why our long-term planning is so important. We have detailed plans in place to anticipate future challenges and understand what we need to do to address these, and we build these needs into our business plans for each five-year regulatory period to ensure we can agree the funding we need to act at the right time. We have invested an additional £250 million over 2015–20, from the outperformance we earned over the period, to improve our operational resilience further.

We monitor the performance and health of our assets, with the help of sensors across the network, and this allows us to be proactive. For example, by monitoring pressure in the water network we can spot issues and fix them before we get a burst, saving costs and sparing customers the impact. Where possible, we design our assets to work in tandem with the natural environment, which provides more sustainable and efficient solutions, such as our innovative catchment management approach.

Link to strategic themes

Our Systems Thinking approach is improving the reliability and resilience of our assets, reducing unplanned service interruptions, and enabling us to be more proactive.

By monitoring the health and performance of our assets we can ensure we invest at the right time in solutions that offer the lowest whole life cost.

We invest in training centres to build technical skills and promote future skills through our education programmes.

Our future plans

Systems Thinking provides opportunities for us to increase our resilience further. Our Haweswater Aqueduct Resilience Project (HARP) will be progressed through direct procurement for customers in AMP7 and AMP8, addressing our biggest operational risk in a critical pipeline that transports water from the Lake District to Greater Manchester.

Challenge: Protecting and enhancing the natural environment

The UK government’s current goal is to be the first generation to leave the environment in a better state than we found it. Water management is a key part of this and our industry has a leading role to play. However, the cost of solutions has an impact on customer bills and so we need to balance this goal with the need to maintain affordability and avoid bill shocks. Environmental regulators set stringent consents for our activities to ensure the environment is protected. We take these obligations seriously and work hard to maintain compliance. This requires striking a balance with environmental impacts, such as the use of natural resources and emissions of greenhouse gases.

Our region is fortunate to have some of England’s finest countryside and wildlife, much of it legally protected being designated as National Parks and Sites of Special Scientific Interest. There is growing realisation of the physical and mental health benefits that access to green space has for people and communities.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Natural resources
- Environmental impacts
- Land management and access

How we respond

The EA assesses water companies’ performance across a basket of measures, and we were the joint best performing company over the last five years.

Our regulatory framework shapes the way we manage natural resources and our interaction with the environment, and we work with our environmental regulators to agree long-term plans.

A phased, long-term approach to address all of the concerns and interests of our many stakeholders, including environmental regulators, ensures that the necessary work can be delivered without the costs placing too much pressure on customer bills by agreeing to spread some of the spend required by legislation over several years.

Our catchment land is open to the public with millions of visits a year, and we work with partners to improve the quality of rivers and bathing waters in our region, providing access to the recreational benefits of the natural environment and boosting the local tourism industry.

Link to strategic themes

Our consultation tells us customers value the natural environment in our region and want us to protect and enhance it, while maintaining affordable bills.

We use pioneering catchment projects that combine multiple partners and access to other sources of funding to achieve more together for less.

We provide free public access to our land, many of which are in areas of outstanding beauty, with over nine million visits every year.

Our future plans

We are expanding our catchment systems thinking approach to more catchments to create further value for the natural environment, and we have started some of our AMP7 environmental improvement plans early this year.

Challenge: Adapting to a changing climate

The biggest anticipated impact on our natural environment comes from climate change. We must plan well into the future to understand what changes we are likely to experience in our region as a result of climate change, and continually adapt to meet the risks and opportunities this presents.

The main opportunity is the potential for water sharing, as our region typically receives more rainfall than the comparatively drier south.

The main risks from climate change are the impact of prolonged severe dry periods, which constrain water resources, and intense periods of heavy rainfall, which increase the risk of flooding and pollution incidents.

We need to ensure we have access to resilient water resources, reduce leakage, and encourage less water use in the future to protect this critical resource. We need to ensure our infrastructure can cope with increased surface water to reduce the risk of flooding.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Environmental impacts
- Climate change
- Leakage and water efficiency

How we respond

Our response to climate change risk involves mitigation (minimising our greenhouse gas emissions) and adaptation (ensuring our services are resilient to a changing climate). Where practical, we generate renewable energy on our sites through solar panels, wind turbines, and the use of bioresources at wastewater treatment works, helping to reduce our emissions. We have reduced our carbon footprint by 73 per cent since 2005/06. During the year we have committed to six pledges to help us achieve significant further reductions in emissions.

We have detailed plans that set out how we will adapt to meet the challenges of climate change, and we are targeting a 15 per cent reduction in leakage over AMP7. We work with third parties to encourage sustainable drainage solutions to help cope with surface water in periods of heavy rainfall, and we encourage customers to use less water.

Link to strategic themes

We help customers to use less water, with advice and free water saving gadgets, saving them money as well as protecting this resource.

Our renewable energy generation helps to reduce our reliance on purchasing energy and therefore save costs.

We have reduced our carbon footprint significantly in recent years and are committed to further reduce our emissions.

Our future plans

We have a detailed 25-year Water Resources Management Plan, Drought Plan, and two adaptation reports published in 2011 and 2015 that set out how we aim to adapt to meet the challenges of climate change. Read more at **unitedutilities.com/corporate/about-us/our-future-plans**

Challenge: Helping customers with affordability and vulnerability

The socio-economic situation in the UK is still very challenging and water poverty is an important issue. The COVID-19 lockdown and slow down of the economy will only make this more difficult for many customers. How we respond will be crucial to securing and maintaining customers' trust and confidence in the sector in the years ahead.

Our region suffers high levels of extreme deprivation. 18 per cent of households in the North West are affected by water poverty, higher than the national average, and research indicates that many customers who are behind on water charges are behind on other bills and many have a pay-day loan. Our stakeholders are interested in how we provide support for customers in vulnerable circumstances other than financial distress as well, such as disability, first language not being English, or temporary vulnerability brought on by illness or a life event.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Affordability and vulnerability
- NW regional economy

How we respond

We have a leading approach to affordability and vulnerability, with the sector's widest range of assistance schemes. We are helping over 120,000 customers through our affordability schemes, more than double the commitment we made at the start of the 2015–20 period, and through our Payment Matching Plus scheme 15,000 customers became water debt free this year. We offer flexible payment plans and the option for customers to take a payment break if they experience a change in circumstances and we have widened eligibility for our 'Back on Track' social tariff for an initial interim period to 2020/21 and 2021/22.

We led the sector in establishing our Priority Services scheme, with dedicated teams providing additional support to customers with health, mental or financial difficulties during an incident. This scheme is now accredited by the British Standards Institute (BSI), and over 100,000 customers are now registered for this support with more joining every day.

Link to strategic themes

We have a wide range of schemes that help customers struggling with affordability concerns and other vulnerable circumstances.

Through initiatives such as our affordability schemes, our underlying household bad debt expense has halved in the last five years.

For three years, we have brought together regional organisations through our Affordability Summit and launched the 'North West Hardship Hub'.

Our future plans

Through bill reductions and financial support we will help move over 300,000 customers out of water poverty by 2025, extend our Priority Services offering to over 210,000 customers, and improve the quality and scale of the support we provide.

Challenge: Maintaining trust and confidence

Strong relationships are based on trust. Being open, honest and transparent is key to building and maintaining trust and legitimacy. As well as reporting openly this means setting out commitments and delivering on them. Our stakeholders want to know that we are treating suppliers fairly, safeguarding human rights, and protecting personal information from the risk of cyber-crime.

The increasing pace of globalisation means many customers feel disconnected from a lot of large businesses. This has led to growing calls for companies to demonstrate how they are contributing to society as a whole and operating in the public interest.

In recent years the UK water sector has faced challenges to its legitimacy, amplified by some specific issues at a small number of companies. Consequently, trust has been eroded and questions raised about the ownership structure of the sector, and Ofwat has called for further transparency and disclosure around board leadership and decision-making processes.

The importance of how we respond to this challenge can be seen in some of the material issues identified:

- Trust, transparency and legitimacy
- Corporate governance and business conduct

How we respond

We have open and transparent reporting around all of our equity and debt financing arrangements, do not use offshore financing vehicles, and our reporting is trusted by Ofwat who has awarded us 'self-assurance' status three years in a row.

Our human rights policy can be found on our website, with links to other related policies including our modern slavery policy and sustainable supply chain charter.

Cyber-crime has been on the increase and, as the holder of customer information, is a threat we take very seriously.

We work with suppliers and contractors whose business principles, conduct and standards align with our own. Our key suppliers have committed to our sustainable supply chain charter. We support the appointment of a small business commissioner to investigate companies who do not treat suppliers fairly, are a signatory to the Prompt Payment Code, and fully comply with rules on reporting payments to suppliers.

Link to strategic themes

We engage continually with customers to understand their expectations in relation to service and behaviour, through things like our quarterly Brand Tracker.

We maintain a stable A3 credit rating with Moody's for United Utilities Water Limited, which helps us maintain efficient access to the debt capital markets.

We retained self-assurance in Ofwat's Company Monitoring Framework assessment for three years.

Our future plans

Operating in a responsible manner is a key driver of trust with our stakeholders. Our continued compliance with the corporate governance requirements of a listed company helps ensure the transparency of our reporting and behaviour.

Challenge: Protecting corporate and financial resilience

The availability of skilled engineers depends on economic and social conditions, and we need to ensure an appropriate pipeline of skills in younger generations too, especially in the areas of science, technology, engineering and mathematics (STEM). As the world becomes increasingly digital, we need to have the right people and skills to manage our business in the modern world.

We believe the most resilient and effective companies have a diverse, engaged and motivated workforce, who can bring their different ideas and perspectives to help us find solutions.

Long-term financial resilience starts with a robust balance sheet and management of financial risks. Companies have to be aware of their own financial situation and make sure that they understand the financial resilience of others such as suppliers and former employees.

The importance of how we respond to this challenge can be seen in some of the material issues identified, such as resilience, and financial risk management.

- Affordability and vulnerability
- NW regional economy

How we respond

We build skills resilience through training and development, including digital skills. We have graduate and apprentice schemes, and ambassadors that work with schools and education institutes to encourage the younger generation to pursue STEM careers. We maintain good relationships with employees and trade unions, to ensure an engaged and motivated workforce, and we continually strive to build diversity across all types of role and all levels within our business. We have a Gender Equality Network that helps by providing role models, mentoring and opportunities. Women are represented at all levels of our company, and a third of our combined board and executive team is female, as can be seen below.

As part of a publicly listed group, we consistently adhere to the highest levels of governance, accountability and assurance. We have a strong and robust balance sheet, a secure pension position, and take a prudent approach to financial risk management.

Link to strategic themes

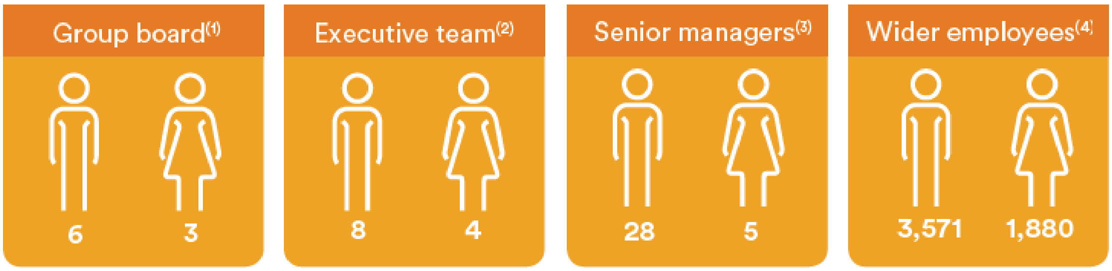
In its initial assessment of our business plan for 2020–25, Ofwat commended our approach to resilience as sector leading and setting the standard for others to follow.

Our robust capital structure and relatively low gearing provide long-term financial resilience and future financial flexibility.

We have award winning training centres, the only ones in the water industry approved to run Ofsted accredited programmes.

Our future plans

Creating strong relationships with employees and suppliers will help build a resilient value chain, and our focus on good corporate governance and prudent financial management ensures we have a basis for long-term success.



(1) UUG Group board as at 31 March 2020

(2) Executive team excludes CEO and CFO, who are included in UUG group board figures

(3) As at 31 March 2020, there were eight male and three female employees appointed as statutory directors of subsidiary group companies but who do not fulfil the Companies Act 2006 definition of 'senior managers'

(4) Wider employees as at 31 March 2020

How we measure our performance

To help measure progress on how well we are delivering our purpose and adding value for all our stakeholders, we monitor and measure our performance against a range of operational and financial key performance indicators (KPIs), as well as other performance indicators for each stakeholder group.

Our KPIs for the 2015–20 period

We have a range of metrics for our KPIs for the current regulatory period, covering important areas such as customer service and environmental performance, as well as financial indicators.

Our operational KPIs are aligned with our strategic themes, and reflect the outcomes we have committed to deliver for customers and other stakeholders, including the environment. A description of these operational KPIs, our targets for each, and our performance against these targets can be seen on pages 38 and 39.

Our financial KPIs assess both the profitability and sustainability of our business from a financial perspective. We set internal budgets for financial KPIs but we do not have externally declared targets for these.

Our operational and financial KPIs remain consistent with last year, being the final year of the current regulatory period, albeit we have updated the definition of underlying earnings per share, as we now report this measure excluding the impact of deferred tax, in line with the approach taken by our listed peers. We have set new KPIs for the 2020–25 period, as set out on the next page.

Our executive bonuses and long-term incentives are closely aligned to our financial and operational performance KPIs.

Annual Performance Report (APR)

Performance against our regulatory contract is monitored and assessed each year, and reported within an Annual Performance Report (APR), as required by Ofwat for all water companies since the start of the current regulatory period in 2015/16, replacing the previous ‘regulatory accounts’.

Most of our operational KPIs relate to this regulatory performance on a high level, and it is within the APR that more detail can be found on the components within these measures, as well as narrative detail about our 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 and prepared in accordance with the regulatory accounting framework. This differs from IFRS reporting, and a reconciliation to IFRS reporting is provided in our APR.

Our APRs for previous years are available on our external website, and the APR for 2019/20 will be published in July 2020.

Other performance indicators

Our KPIs provide a snapshot of our performance across a variety of areas, but these are by no means the only metrics by which we monitor and assess our performance on a regular basis, and we report against other metrics both internally and externally.

As discussed on pages 6 to 11, we engage with a variety of stakeholders and this gives us a view of what matters most to them. We report on a selection of other stakeholder metrics on pages 40 to 42 of this report, based on the measures shown to be of highest interest to our stakeholders.

For example, on customer service our KPIs are Ofwat’s measures, the qualitative and quantitative Service Incentive Mechanism (SIM), but on page 40 we report on the level of customer complaints, use of digital communication channels, customers helped through assistance schemes, and the impact of water efficiency measures.

On environmental performance, our KPIs include performance against our leakage target and the overall assessments by the Environment Agency and Dow Jones Sustainability Index, and on page 60 we report on more specific environmental performance indicators, such as carbon footprint, proportion of waste going to beneficial use rather than landfill, and measures of natural capital.

We regularly report on numerous corporate responsibility performance measures on our external website.

Planned changes for the 2020–25 period (AMP7)

Aligning closer to our stakeholders

In line with our purpose, we measure our performance by reference to the value we create for each of our stakeholder groups. We have increased this alignment for the 2020–25 period (AMP7), in which we have selected one operational key performance indicator (KPI) for each of our stakeholder groups. We will retain the linkage with our strategic themes, recognising that there is some overlap and therefore not restrict measures to just one of these themes.

Our KPIs for the 2020–25 period

Our financial KPIs will be largely the same as the 2015–20 period, with the addition of having low-dependency defined benefit pension schemes with nil deficit. This recognises the increasing importance of this strong and secure position for our people, which represents a significant driver of relative value.

For our operational KPIs we have selected one main metric for each stakeholder group, based on the top material issues identified through our stakeholder engagement as set out on pages 6 to 11.

Communities

We will report our community investment over the 2020–25 period as the key measure for communities. We will target increasing this investment by at least 10 per cent over the period compared to the average between 2010 and 2020. This measure links to “In a responsible manner”.

Customers

We will report our ranking on Ofwat’s customer measure of experience (C-MeX), as customer sentiment is likely to be influenced by a broad range of service components and so best satisfies the spectrum of what matters to customers. We will target being upper quartile within the industry each year. This measure links to “The best service to customers”.

Employees

We will report employee satisfaction as the key measure for employees, with a target to be at least as good as the UK high performance norm. This measure links to “In a responsible manner”.

Environment

We are retaining the Environment Agency’s Environmental Performance Assessment as a key metric for our performance to create value for the environment in AMP7, and will target upper quartile performance within the industry each year. This measure links to “In a responsible manner”.

Suppliers

We will report the percentage of invoices paid within 60 days as our main metric for suppliers, targeting at least 95 per cent in line with the requirements of the Prompt Payment Code. This measure links to “In a responsible manner”.

Other performance indicators in AMP7

We have selected one main metric as the key performance indicator for each stakeholder group. We will, however, continue to report our performance against the many other metrics for our stakeholders, as we have done this year, within our annual reports, our APRs, and on our corporate website

How we measure our performance

Our operational KPIs

Company objective/KPI	Definition	Target	Performance
Best service to customers			
Wholesale outcome delivery incentive (ODI) composite	Net outperformance payment/(penalty) accrued across United Utilities' 19 wholesale financial ODIs, more detail of which can be found in our Annual Performance Report.	End the 2015–20 regulatory period with around £40 million cumulative net ODI outperformance payment.	2019/20: £22.4 million outperformance payment (cumulative £43.9 million outperformance payment) 2018/19: £19.2 million outperformance payment (cumulative £21.4 million outperformance payment) 2017/18: £7.0 million penalty (cumulative £2.2 million outperformance payment) 2016/17: £6.7 million outperformance payment (cumulative £9.2 million outperformance payment)
Service incentive mechanism – qualitative	Ofwat-derived index based on quarterly customer satisfaction surveys, measuring the absolute and relative performance of the water companies. Each company receives a score in the range of zero to five, with five being the best attainable score.	To move towards the upper quartile in the medium term.	**2018/19: 4.53** 2017/18: 4.49 2016/17: 4.42 2015/16: 4.27 2014/15: 4.24
Service incentive mechanism – quantitative	Ofwat-derived composite index based on the number of customer contacts, assessed by type, measuring the absolute and relative performance of the water companies. Each company receives a SIM point total, where the lowest score represents the best performance.	To move towards the upper quartile in the medium term.	**2018/19: 70** 2017/18: 71 2016/17: 77 2015/16: 95 2014/15: 99
Lowest sustainable cost			
Totex outperformance	Progress to date on delivering our promises to customers within the cumulative 2015–20 wholesale totex final determination allowance.	To outperform Ofwat's final determination totex allowance by £100 million over the 2015–20 regulatory period.	**2015–20: Outperformed the final determination allowance for its original scope by around £100 million over the 2015–20 regulatory period** Totex was a new measure for the 2015–20 period, hence no prior years' comparators
Financing outperformance	Progress to date on financing expenditure outperformance secured versus Ofwat's industry allowed cost of debt of 2.59 per cent real over the 2015–20 period.	To beat Ofwat's industry allowed cost of debt.	**2015–20: Exceeded £450 million outperformance** 2010–15: Exceeded our £300 million target outperformance.

Household retail cost to serve	Cost to serve in our household retail business compared with Ofwat's revenue allowance (including margin).	To minimise costs compared with Ofwat's revenue allowance.	**2019/20: £13 million outperformance on an underlying basis** 2018/19: £5 million outperformance 2017/18: £9 million outperformance 2016/17: £14 million outperformance 2015/16: £10 million outperformance
In a responsible manner			
Leakage – average annual leakage	Average annual water leakage from our network quantified in megalitres (Ml) per day.	To meet our regulatory leakage target of 462.65 Ml per day for each year in the 2015–20 regulatory period, as set by Ofwat.	**2019/20: Met target** 2018/19: Met target 2017/18: Met target 2016/17: Met target 2015/16: Met target 2014/15: Met target
Environment Agency performance assessment	Composite assessment produced by the Environment Agency (EA), measuring the absolute and relative performance of the 11 water and wastewater companies across a broad range of areas, including pollution.	To be a first quartile performer (i.e. at least 4th) on a consistent basis.	**2018: Joint 2nd*** 2017: Joint 1st 2016: Joint 1st 2015: Joint 2nd 2014: 2nd*latest available assessment
Dow Jones Sustainability Index rating (UUG)	Independent rating awarded using sustainability metrics covering economic, environmental, social and governance performance..	To retain 'World Class' rating each year.	**2018/19: 'World Class'** 2017/18: 'World Class' 2016/17: 'World Class' 2015/16: 'World Class' 2014/15: 'World Class' 2013/14: 'World Class'

Our other performance indicators

Communities

Area	Measure	Status	Performance	Further information
Employee volunteering	Number of hours employee volunteering	A	**2,373** 2,620	Responsibility pages on our website
Charity	Match funding to charity through employee efforts	-	**£101,004** £157,046	Responsibility pages on our website
Community Invesment (LBG data)	Total community investment	A	**£2,261,374** £2,931,479	Responsibility pages on our website
	How investment was made			
	Cash £1,959,502 Time £47,454 In-kind £2,632 Management costs £251,786 Cash £2,717,856 Time £52,409 In-kind £0 Management costs £161,214			
	Type of support			
	Charitable gift £38,823 Community investment £1,818,035 Commercial initiative £152,730 Charitable gift £159,545 Community investment £2,610,719 Commercial initiative £0			

Customers

Area	Measure	Status	Performance	Further information
Complaints	Total number of domestic customer complaints	C	**5,942** 7,007	Our performance (best service to customers)
	Average speed of complaint resolution	C	**3 days** 3 days	Our performance (best service to customers)
Fines	Drinking Water Inspectorate (DWI) fines	C	**0** 2 (£150,000 and £50,000)	Our performance (best service to customers)
Digital	Number of customers using online services – My account	C	**984,780** 860,848	Our performance (best service to customers)
Customer assistance	Number of customers assisted by Priority Services	C	**99,992(1)** 74,505	Our performance (best service to customers)
Customer water efficiency	Total customer water savings from measures promoted by United Utilities	C	**4.25 Ml/d** 4.43 Ml/d	Our business model (key resources)

Employees

Area	Measure	Status	Performance	Further information
Employee engagement	Overall employee engagement	C	**84%** 81%	Our performance (in a responsible manner)
	Percentage of employees with trade union membership(2)	-	**45%** 45%	Our business model (key resources)
Gender pay reporting	Mean gender pay gap	C	**11.3%** 13.2%(3)	Corporate governance report

	Median gender pay gap	C	**13.8%** 15.3%	Corporate governance report
Employee development	Average number of days of training per FTE per year	C	**4.44 days** 3.57 days	Our performance (in a responsible manner)
Health and safety	Employee Accident Frequency Rate (per 100,000 hours)	C	**0.110** 0.152	Our performance (in a responsible manner
	Contractor Accident Frequency Rate (per 100,000 hours)	C	**0.083** 0.092	Our performance (in a responsible manner
Workforce profile	**2020 84% White 2% BAME 14% non-disclosed 66% Male 34% Female 1.91% Disability (including long-term health conditions)**			
	2019 83% White 2% BAME 15% non-disclosed 65% Male 35% Female <1% Disability (including long-term health conditions)			

1. This figure increased to over 100,000 shortly after the year end.
2. Based on employees who pay their union subscriptions via their payroll.
3. The mean gender pay gap figure for 2019 has been amended from 13.1 per cent to 13.2 per cent since the production of last year's Annual Report.

Environment

Area	Measure	Status	Performance	Further information
Carbon and energy	Carbon footprint	C	**159,243 tCO_2e** 167,856 tCO_2e	Our approach to climate change
	Energy used	A	**984 GWh** 976 GWh	Our approach to climate change
Waste	Total waste	A	**752,480 tonnes** 694,846 tonnes	Responsibility pages on our website
	Waste to benefical use	C	**98%** 96%	Responsibility pages on our website
Leakage	Total leakage at or below 462.65Ml/d	C	**Met Target** Met target	Annual performance report published in July
Fines	Number of incidents resulting in fines	C	**0** 0	Our performance (in a responsible manner)
	Enforcement undertakings	C	**1 (£511,000)** 5(£1.5 million)	Our performance (in a responsible manner)
Natural capital	Number of trees planted on catchment land	C	**29,696** 27,190	Responsibility pages on our website
	No net loss of biodiversity aross capital programme	C	**100%** 100%	Responsibility pages on our website

Suppliers

Area	Measure	Status	Performance	Further information
Payment statistics	Average time taken to pay invoices	C	**14 days** 25 days	Supplier pages on our website
	Suppliers paid on time	C	**97%** 98.57%	Supplier pages on our website

Status key:

A - Deterioration on previous year

B - Same as previous year

C - Improvement on previous year, no scope for improvement or the target has been achieved

— Not applicable

Performance key:

2019/20

2018/19

Responsible business

One of our strategic themes deals with operating and behaving in a responsible manner. This is a core part of who we are as a business and has been for many years.

Responsible business is in our DNA

We have a strong track record leading on environmental, social and governance matters. Over the past 20 years we have measured ourselves against national and international benchmarks of responsible business practice, often breaking new ground in the way the water sector approaches challenges such as catchment management schemes and support for vulnerable customers.

This is not just about what we do, but how we do it. A key strength is the continuity of our approach with a clear purpose and strategic objectives. This long-standing commitment to responsible business has provided a solid foundation upon which to evolve existing programmes, develop new initiatives, and respond to the changing world in which we operate.

Creating long-term value for all

Having tangible, externally recognised measures of our behaviour and performance helps retain the trust of those who take an interest in the way we do business. We collate and monitor a wide range of performance measures to assess our progress and report these publicly. We align ourselves to recognised management standards and accreditations to give confidence in the way we are operating.

Index/rating	Description	Performance
Dow Jones Sustainability Index	The Dow Jones Sustainability Index ranks the sustainability approach of the top 10 per cent of the world’s biggest companies based on long-term economic, environmental and social criteria.	**For 2019, our overall performance was 79 per cent and we attained World Class status for the 13th consecutive year. We were awarded SAM Silver Class in the Sustainability Yearbook 2020.**
ISS	ISS recently expanded its methodology used by investors to identify governance risks within their portfolios to include environmental and social risks.	**In the annual review of November 2019 our status was assessed as Prime.**
MSCI ESG	Provides ESG ratings on an AAA to CCC scale according to exposure to industry specific ESG risks and ability to manage those risks relative to peers.	**As of 2019, United Utilities Group PLC received an MSCI ESG rating of AA.**
Sustainalytics	Sustainalytics provides ESG risk ratings which summarise company performance in relation to industry peers and gives an overview of ESG controversies.	**In 2020 Sustainalytics has given us a low risk rating with a score of 19.1. This positions us as 2 out of 40 in the water utility sector.**

Euronext Vigeo Eiris	Euronext Vigeo Eiris indices are composed of the highest-ranking listed companies according to an evaluation of their ESG performance.	**We are part of the UK 20 (the 20 most advanced companies in the UK) as of December 2019.**
Ethibel Sustainability	Composition of the Ethibel Sustainability Indices is based on a best-in-class approach to companies included in their sustainable Investment Register combined with ethical exclusion criteria.	**United Utilities Group PLC has been reconfirmed as a constituent of the Ethibel Sustainability Index (ESI) Excellence Europe since 8 May 2020.**

Contributing to the UN SDGs

The Sustainable Development Goals (SDGs) are a collection of 17 global goals to be achieved by the year 2030, and were adopted by a summit of the United Nations (UN) in 2015. They are designed to be the blueprint to achieve a better and more sustainable future for all, aiming to end poverty, fight inequality and tackle climate change.

Since they were published, stakeholder interest has increased in the contributions companies are making to the UN SDGs.

Our approach to operating in a responsible manner aligns quite naturally with these goals. We have identified six that are the most material to our business and the nature of the essential services that we provide, and to which we contribute the most.

The following details how we contribute to meeting each of these six SDGs.

Clean water and sanitation – Ensure availability and sustainable management of water and sanitation for all

This is our core function and the reason we exist – providing safe, resilient and affordable water and wastewater services to customers across the North West of England.

Part of this goal is about avoiding wasting water, and we promote water efficiency through campaigns, advice, education and free water saving gadgets for customers.

We protect and enhance water-related ecosystems across our region.

Decent work and economic growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Our daily operations provide direct and indirect employment for 22,700 people, and we are a big contributor to the North West economy.

We provide training and development opportunities in safe, secure working environments, graduate and apprentice opportunities, programmes for young people experiencing difficulties securing employment, offer equal opportunities to all and value diversity among our employees.

Industry, innovation and infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

We invest heavily in infrastructure, including just under £4 billion in capex between 2015–20 to improve the performance and resilience of our assets and operations to impacts such as those arising from climate change.

We embrace innovation, especially in an increasingly digital world, to ensure the region where we operate has reliable, sustainable and resilient infrastructure, now and into the future.

Sustainable cities and communities – Make cities and human settlements inclusive, safe, resilient and sustainable

We use our understanding of customer needs and priorities to deliver services that meet their expectations and engage with communities to enhance participation in what we do. We plan at least 25 years into the future to prepare for increases in the population and new housing that will need connections for water and wastewater services. We are exploring ways to do this using natural solutions to manage water and wastewater.

Climate action – Take urgent action to combat climate change and its impacts

Responding to the climate emergency is an imperative for us all.

Reducing our greenhouse gas emissions and ensuring that we, and the region we serve, are resilient to the impacts that a changing climate might bring are key to our long-term planning.

Peace, justice and strong institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

We run our business in a responsible manner, and trustworthy is one of our core values.

We have high levels of transparency in our reporting and ethical standards of business conduct and corporate governance – those systems and processes through which our organisation is managed, controlled and held accountable.

Our approach to climate change

Task Force on Climate-related Financial Disclosures (TCFD)

Overview

Climate change has been a subject of strategic and operational focus for us for over two decades. The impact of the environment on our activities, and the impact of our activities on the environment influences how we deliver water and wastewater services to customers. Our response to climate change focuses on its two component parts:

Adaptation – we have used scenario analysis in our business planning and risk management since 1999 to ensure we adapt and improve our resilience to effects of climate change. Our approach to enhancing the resilience of our service is based on Systems Thinking which enables us to look at individual elements of a bigger system and how they interact with the other constituent parts in any given scenario.

Mitigation – we seek to minimise our contribution to climate change by reducing greenhouse gas emissions, especially through our energy and land management strategies, in line with reduction targets first set in 2006. Our contribution to limiting climate change comprises six company-specific pledges.

This is supported by clear and effective governance, strategy, risk management, metrics and targets.

Decades of understanding and responding to climate change

Climate change and the resultant shifts in weather patterns have the potential to significantly impact our operations and the broader environment and ultimately the long-term viability of the water and wastewater services we provide. Hazards such as droughts, floods, storms or heatwaves will continue to become more frequent and more intense. At the same time, we need to decarbonise our operations and limit the amount of greenhouse gases we emit. The illustration below summarises some key activities we’ve undertaken since 2000 to manage both.

Adapting service to a changing climate

Our first climate change adaptation report in 2011, and the second in 2015, highlighted over 100 climate change risks, focusing our strategic planning on the most significant physical risks. Our next adaptation report will include an increased focus on transitional risks.

Over the last eight years, we have adopted a Systems Thinking approach which enables us to forecast how changes in weather conditions will impact us in a predictable way. It allows us to understand how areas of our service are vulnerable to climate change and adapt our plans to improve performance and resilience across key service areas; for example, water supply, leakage, sewer flooding and pollution.

Systems Thinking enables us to adapt to climate change over multiple time horizons. In our Water Resource Management Plan (WRMP), climate data is embedded in over 1,000 scenarios to understand how we can create the right supply demand balance against significant uncertainty for the next 25 years.

A similar baseline risk and vulnerability assessment is being taken as part of our Drainage and Wastewater Management Plans (DWMPs) to understand future performance compared to a baseline. This will identify where we are at risk of failing to meet strategic planning objectives such as internal flooding or wastewater treatment works compliance.

In the shorter term, flooding and droughts have become more prevalent across the North West and they are the forerunners to longer-term climate change impacts. Operationally, Systems Thinking enables us to use big data including weather forecasts to predict demands week to week and set out our system appropriately to manage this – which, despite these extreme weather events, has supported delivery of some of our best performance.

Our contribution to mitigating climate change
As part of our strategy and commitment to decarbonisation we have been tracking and publishing our greenhouse gas emissions since 2001. Our most recent target, set in 2015, was to reduce our greenhouse gas emissions by 50 per cent from the 2005/06 baseline by 2020 (and to achieve a 60 per cent reduction by 2035).

Our gross greenhouse gas emissions since 2005/06(1)

As part of our mitigation strategy, we have outperformed our target, reducing emissions by 73 per cent since 2005/06. Through this strategy we have embedded greenhouse gas emission impact assessments in our project appraisals and financial approvals processes and signed up to the ambitious industry-wide Water UK Public Interest Commitment to achieve net zero emissions by 2030.

Transparency and disclosure

We are committed to transparency and regularly publish carbon and climate change disclosures. For over a decade, we have participated in CDP's Climate Change Programme assessment, where we have been ranked in the top 3 per cent of companies globally and recognised as a Supplier Engagement Leader in 2019.

In addition to our CDP submission, we report in adherence with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standards (2015) and the Science Based Targets Initiative (SBTi).

We have signed the Statement of Support for the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) which was published in June 2017, and we report in line with its recommendations across its four thematic areas.

Governance

Chief Executive Officer Steve Mogford has the highest level of responsibility for the group's preparedness for adapting to climate change and driving our mitigation strategy. Russ Houlden, Chief Financial Officer, has executive responsibility for risk management, a large part of which relates to climate change. Non-executive directors have a collective responsibility to challenge constructively and monitor the delivery of the risk and control framework set by the board.

We have a strong track record of risk management and disclosure of climate change and we continually mature our understanding of the risks. The table below summarises progress over the last investment cycle (2015–20) and sets out plans for the coming year.

Governance

Progress (2015–20):

- CEO led engagement with executive team to deliver required standards in managing climate change risks and opportunities through our existing governance structure;
- Executive led improvements to governance of climate change – achieved ‘leadership level’ in 2019 CDP governance category; and
- Carbon valuation appraisal model and guidance included across capital approval processes and governance.

Plans (2020/21):

- Executive oversight of required enhancements to attain an overall top score across all categories for the 2020 CDP assessment.

Risk management

Progress (2015–20):

- Identification and alignment of climate change risks and opportunities into company risk management framework;
- Completed robust review to identify which corporate risks would be influenced by climate change; and
- Published the risks identified as being particularly sensitive to climate change.

Plans (2020/21):

- Further formalisation of climate change physical and transitional risks into corporate risk framework and integration into risk management systems.

Strategy

Progress (2015–20):

- Set out AMP7 performance commitments with financial incentives for air quality and natural capital;
- Water resources and flood models including climate scenario analysis, informed by CP09 forecasts;
- Published our second adaptation report, in 2015, outlining our holistic, integrated and partnership approach to a changing climate;
- Climate change resilience explicitly set out in our PR19 business plan;
- Strategic commitments and pledges made for emissions reductions; and
- Recognised as a Supplier Engagement Leader by CDP in 2019.

Plans (2020/21):

- Whole life costing and investment appraisals changes, with prioritisation to include variable carbon pricing;
- Company-wide climate-related scenario analysis;
- Publication of a climate change adaptation progress report (2020) which will include a review of climate risks in line with Defra’s categorisation for adaptation;
- Implementation of climate change resilience plans (physical and transitional) in AMP7; and
- PR24 strategic planning to include climate mitigation pledges and long-term climate projections.

Metrics and targets

Progress (2015–20):

- Achieved highest mark 'leadership level' in 2019 CDP assessment of targets and emission reductions initiatives;
- Step change in maturity of understanding our GHG emissions; and
- Refreshed climate change mitigation strategy to deliver science-based targets and carbon commitments and pledges.

Plans (2020/21):

- Review scope 3 emissions for consistency with the GHG protocol principles to set a science-based scope 3 target by 2021;
- Manage scope 3 emissions as part of our 'United Supply Chain'; and
- Establish tracking and reporting against our climate mitigation strategy commitments.

The TCFD has four core elements under which it recommends organisations report on their approach to climate change

The text of our TCFD disclosure was reviewed by Corporate Citizenship, a leading sustainability consultancy, to ensure that it accords with current Task Force on Climate-related Financial Disclosures best practice.

Risk management

Climate-related risks (physical and transitional) are managed through our embedded risk management framework and across our governance and reporting processes. Our approach ensures the identification, assessment and management of climate change risks to reduce impact and likelihood and maximise opportunities.

Mitigation metrics are aligned to limiting global temperature rises to 1.5°C. Adaptation metrics account for the risks and uncertainties associated with higher temperature rises (including 2°C and 4°C) and how the many potential variations in climate change impact the delivery of service improvements. Targets are set with risk and uncertainty included.

While climate change is largely a downside risk for our business, we have identified some potential opportunities. For instance, in addition to energy generation, a reduction in the frequency of extreme cold weather could reduce the number of freeze-thaw burst events and warmer conditions may improve the efficiency of biological treatment processes.

As part of our risk management activities, we have assessed our risks to identify those most adversely impacted by climate change. While the most significant are all physical risks, transitional risks are also managed through our risk management framework.

- **Failure to treat wastewater (exceedance of permits)**
- **Failure of above ground water and wastewater assets (flooding)**
- **Failure of the wastewater network (sewer flooding)**
- **Water network failure**
- **Failure of wastewater assets (serious pollution)**
- **Water sufficiency event**
- **Failure to treat sludge**

Many of these risks are subject to complex modelling which incorporates the impact of climate change and the associated adaptation options in our long-term plans.

Our 25-year WRMP is a sophisticated example of a climate change risk assessment. We've worked with the United Kingdom Meteorological Office for many years to understand how weather metrics, like temperature and rainfall, affect the consumption of water by customers. We understand the likely fluctuations in how our supply system responds in different circumstances, defining the headroom required to take into consideration climate change uncertainty using the latest UK climate projections and drought indicators.

Our plan considers how resilient our water supply system is to a host of non-drought hazards related to climate change, including flooding, freeze-thaw, contamination, asset failure and power failure. We are planning a programme of work to improve resilience across the next 25 years.

DWMPs are being developed to offer the same level of climate change scenario assessments for sewerage planning.

We are in the process of incorporating longer-term climate change impacts more explicitly in our corporate risk framework by considering the scale of impact based on current controls under two scenarios to 2050 and 2100. This will be undertaken initially for the most significant climate risks, then all other climate risks, bringing several benefits. It further raises the profile of climate change adaptation and allows the board enhanced insight into climate risks from within existing risk management processes. It will highlight where climate risks are not well understood or where existing controls are deemed inadequate to manage the risk in the long-term to allow corrective action to be taken.

Looking ahead, we will need to undertake research to better understand how climate factors will impact some aspects of performance, continue to collaborate with others to better understand interdependencies and work in partnership to address risk, and cultivate innovation to find new ways to cope with operating in a different environment.

Strategy: adapting to and mitigating climate change

Our strategy to adapt to a changing climate and how we manage uncertainty

Adapting to the impacts of climate change needs to accommodate the levels of uncertainty in the global delivery of a 1.5°C rise. There is a large degree of uncertainty in the longer term because of outcomes from different emissions scenarios and the complexity of climate modelling.

Climate change trends are occurring slowly against the backdrop of normal, natural weather variation which makes it challenging to identify when climate change is happening and when trigger levels are reached. Our strategies are increasingly cognisant of that uncertainty and seek to deliver flexible and adaptive plans that can evolve as the reality emerges.

Across our strategy and planning framework we assess the impact of climatic change in rainfall, temperature and storms (wind speed). In addition to the 1.5°C rise targeted globally, we assess various scenarios at both 2°C and 4°C. This is critical to managing uncertainty and establishing a baseline from which we can understand future performance and where we are at risk of failing to meet strategic planning objectives such as internal flooding, wastewater treatment works compliance and the supply demand balance.

Understanding the range of weather impacts is therefore central to our scenario baseline and the potential future variations used are set out below.

Projected changes for North West England at a global mean warming of 2°C above pre-industrial levels. Aligned to the UK Climate Projections 2018 (UKCP18) Derived Projections of Future Climate over the UK, Met office (November 2018)

Type of change	Low	Median	High
Winter temperature	0 to +1°C	+1 to +2°C	+2 to +3°C
Summer temperature	0 to +1°C	+1 to +2°C	+2 to +3°C
Winter rainfall	-10%	+10%	+20%
Summer rainfall	-30%	+10%	+20%
Winter wind speed	-0.6m/s	-0.2m/s	+0.4m/s
Summer wind speed	-0.4m/s	-0.2m/s	+0.2m/s
Daily temperature (min/max) - winter	+1.5°C		+1.0°C
Daily temperature (min/max) - winter	+2.0°C		+2.0°C

Projected changes for North West England at a global mean warming of 4°C above pre-industrial levels. Aligned to the UKCP18 Derived Projections of Future Climate over the UK, Met office (November 2018)

Type of change	Low	Median	High
Winter temperature	+1 to +2°C	+2 to +3°C	+3 to +4°C
Summer temperature	2 to +3°C	+3 to +4°C	+4 to +5°C
Winter rainfall	+10%	+20%	+30%
Summer rainfall	-40%	-30%	-10%
Winter wind speed	-0.4m/s	+0.2m/s	+0.4m/s
Summer wind speed	-0.6m/s	-0.4m/s	-0.2m/s
Daily temperature (min/max) - winter	+3.0°C		+3.0°C
Daily temperature (min/max) - winter	+4.5°C		+4.5°C

In the next 12 months, we will test thousands of weather scenarios for our WRMP, including the impact of a high scenario. This assumes a 5°C increase by 2100 on our supply capabilities. A complicated hydrological assessment of the process of turning rainfall into flow will be undertaken to understand the impact on water resource levels. Across the 10,000 climate change projections investigated, we take a well-balanced distribution to narrow these down to 100 scenarios. They are then put through our rainfall runoff model so we can understand the impact on supply from the amount of water available year on year. We work closely with the Environment Agency and leading experts to select the most appropriate scenario to use in planning. The uncertainty brought from the other scenarios is then analysed and included in our headroom calculations, thus ensuring we can quantifiably understand the levels of risk in our available water supply.

As always there is stringent governance to ensure these projections are correctly developed and used. Internal, external and regulator audits are undertaken to ensure we use these projections in line with UK Water Industry Research (UKWIR) best practice and Defra guidelines.

The next 12 months are critical for DWMPs as we complete and publish the outputs of our Baseline Risk and Vulnerability Assessment. This will be the result of modelling our systems and applying several impacts, including climate change, to determine future performance and risks associated with that performance.

Model	Climate change impact	Risk and performance level assessment
Hydraulic network models	Rainfall scenarios alongside future population change and urban creep	Future hydraulic flooding performance
Asset risk projection model (Pioneer)	Apply climate change impacts via changes in blockage rates	Future flooding and pollution performance with optimised system recommendations for asset interventions
Wastewater treatment works model	Changes to permit limits based on environmental models (rainfall and temperature)	Future likelihood of wastewater treatment works compliance
Source Apportionment **– GIS**	Input models using rainfall impacts on increasing river levels alongside temperature increases	Future water quality in the receiving water course informing the risk in achieving future permit limits

This assessment will allow us to understand, for our base-allowed investment, the levels of service expected. Coping with 3°C will require higher levels of investment than coping with 1.5°C and so, if that were to become the likely scenario, we would need to engage with stakeholders on the appropriate sharing of that cost between generations of customers.

With this understanding, a primary objective of our adaptation strategy is to prioritise interventions that deliver resilience for all climate variables. For example, reducing leakage and encouraging lower water consumption will create headroom within our supply-demand balance and provide an increasingly resilient service. This is especially important as changing rainfall patterns will affect the rate at which our reservoirs refill. Similarly, encouraging more sustainable drainage and reducing surface water into combined sewer systems will help reduce the impact of variations from future storm intensity, and frequency, on performance for customers and the environment.

A further objective of our adaptation strategy is to address the transitional risks we have as an energy intensive business, including those resulting from decarbonisation and exposure to additional taxation. Our energy strategy is focused on using less and generating more. This year we generated 191 Gigawatt hours (GWh), equivalent to almost a quarter of the electricity we consumed.

Future contributions to limiting global temperature rise to 1.5°C – a science-based target

Our emissions reduction strategy is focused on scope 1 and 2 emissions. We have committed to achieve science-based targets, based on the Paris Agreement’s highest level of ambition, to limit global temperature rise to 1.5°C above pre-industrial levels. This is in line with the SBTi Criteria and Recommendations(1) guidance on the most recent emissions scenarios, policies and greenhouse gas accounting standards.

SBTi guidance requires a medium and long-term target to be set based on those global temperature limiting ambitions. It requires a new baseline to be set from the most recent year for which data is available, which for us is 2019/2020.

We have committed to a medium-term target for a further 42 per cent reduction in emissions by 2030 from a new 2019/20 baseline. The science-based approach presents a target of a 100 per cent reduction by 2050.

We share the water sector’s ambition to achieve net zero emissions by 2030 and this is likely to require purchasing some carbon offsets given the challenge to eliminate wastewater treatment process emissions. Our strategy accommodates the different accounting rules for purchasing offsets. Under the guidelines set by the SBTi, purchased offsets are not permitted in the delivery of any science-based targets, so these will not be an option for our 2030 and 2050 science-based target commitments. However, in delivering the sector commitment of net zero by 2030, purchase of offsets are permitted and will therefore be assessed alongside other strategic options.

Our climate change mitigation strategy

Our strategy to deliver these science-based targets covers three key areas: to optimise energy consumption; generate more renewable energy; and lower our emissions. Our work to reduce emissions includes: wastewater process and storage; sludge process; biogas use and sludge disposal; fleet fuel and management; fuel use; renewable energy; land use; natural capital; and waste and resources. Our current strategy is summarised in a series of six pledges:

Pledge 1: Commitment to meet our science based emissions with a further 42 % reduction by 2030 and 100% reduction by 2050

Pledge 2: 100% renewable electricity by 2021

Pledge 3: 100% Green Fleet by 2028

Pledge 4: 1000 hectares of peat restoration by 2030

Pledge 5: Planting 1 million trees to create 220ha woodland by 2030

Pledge 6: Commitment to set science-based scope 3 emissions targets by 2021

Next year, we will focus on reducing scope 3 emissions. This will cover influencing emissions of employees, commercial partners and suppliers and emissions of customers. Further, we will develop future standards, technologies, markets and financial solutions to support the delivery of our net zero ambition with a further commitment to set a science-based scope 3 target by 2021.

Metrics and targets

Adaptation – delivering an improved service despite climate change

We have a number of key metrics and targets that demonstrate our capability of adapting to climate change and increasing the resilience of our service. These metrics and targets are focused on the corporate risks identified in our adaptation report that are most adversely impacted by climate change.

Water sufficiency

In order to release headroom in our water supply demand balance we have set short and long-term targets against key performance commitments. Our targets for reducing per capita consumption (how much customers use) and leakage will reduce the demand for water in all climate scenarios.

Per capita consumption: Household consumption has increased slightly over the last five years with the average person currently using around 140 litres per day. Our plan is to work with customers and stakeholders to reduce that figure to around 135 litres by 2025 and to around 115 litres by 2045. We have developed an AMP7 water efficiency programme, primarily aimed at reducing household consumption, and working with the non-household sector to drive water efficiency across the board.

Leakage: We have achieved our regulatory leakage target every year for 14 years. From 2015 to 2020, we have delivered a stable level of leakage and, by 2025, we plan to reduce leakage by 15 per cent. In the longer term, to 2045, we plan to reduce leakage by just over 40 per cent. In the last 12 months, we have installed around 44,000 noise monitoring devices (100,000 by 2025) to locate hidden leaks in the most challenging parts of our water network and enable overall reductions in leakage.

Water network failure

We have assessed our ability to maintain water supply to our customers, even in extreme weather events, and we have set improving targets for supply interruptions.

We have reduced interruptions to supply by nearly 40 per cent since 2015. Supported by Systems Thinking and the use of machine learning and artificial intelligence, we are targeting a further 50 per cent reduction by 2025, from a 2020 baseline.

Failure of the wastewater network

To reduce the impact of variations from future storm intensity and frequency on the performance of our wastewater network we are targeting significant reductions in sewer flooding.

We have set ourselves a target to reduce it by 20 per cent by 2025 and 70 per cent by 2045.

Failure to treat sludge

Climate change puts an additional strain on the treatment and recycling of sludge particularly with the flooding of farmland which is the outlet for recycled sludge (biosolids). By taking a Systems Thinking approach and managing our assets as a regional system we can mitigate for loss of treatment capacity by transporting the sludge to other treatment centres or by using capacity in the market.

To measure the success of this approach we set stringent targets for 100 per cent sludge treatment compliance with regulatory requirements and we have achieved this for five consecutive years.

In addition, and new for AMP7, we are targeting 100 per cent conformity to best practice requirements set out by the national Biosolids Assurance Scheme.

Failure to treat wastewater (exceedance of permits)

The impact on climate change can affect the wastewater treatment process in a number of ways: prolonged dry periods can lead to septicity and rivers to run low; high rainfall intensity can cause high flows to be passed through to treatment facilities, outfalls to block and river banks to erode.

We have managed this risk through our treatment compliance metric which assesses our wastewater treatment compliance against environmental permits. Having delivered a stable level of service over AMP6 we are joint industry leaders in the Environment Agency's Environmental Performance Assessment across AMP6 and achieved 4 star status for three consecutive years.

We are striving to meet 100 per cent level of compliance for this measure in AMP7.

Failure of wastewater assets (serious pollution)

Pollution incidents can occur when the sewer system becomes overwhelmed and it overflows into the nearby watercourse.

Despite the upward pressure from climate change, since 2012 we have achieved 37 per cent reduction in the total number of pollution incidents (category 1, 2 and 3) and an industry-leading position for serious pollution incidents (category 1 and 2).

We have set targets to reduce the number of pollution incidents by a further 27 per cent by the end of AMP7.

Our contribution to mitigating climate change – carbon and energy

Careful operational energy management and increasing renewable energy generation means we have achieved a further reduction of 8,613 tCO_2e this year.

Our total greenhouse gas emissions for the financial year 2019/20 were 159,243 tCO_2e, 73 per cent below the 2005/06 baseline.

This performance means we have outperformed our target to reduce our operational greenhouse gas emissions by 50 per cent from the 2005/06 baseline and to achieve a 60 per cent reduction by 2035.

We are now committing to achieve new medium and long-term science-based targets, based on the Paris Agreement's highest level of ambition, to limit global temperature rise to 1.5°C above pre-industrial levels.

2019/20 scope 1 and 2 net emissions, which were 115,424 tCO_2e, will form the baseline for our science-based targets.

Reporting and assurance

We measure and report the greenhouse gases that result from all United Utilities' activities. We have used the financial control approach so our energy and greenhouse gas emissions reports are aligned with the consolidated financial statements for United Utilities Group PLC. This includes its subsidiaries listed in section A8.

Our measurement and reporting is aligned to the GHG Protocol Corporate Accounting and Reporting Standard (2015) and the recommendations of the TCFD. We report as required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations following the 2019 UK Government Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance and our reporting is compliant with the international carbon reporting standard (ISO 14064, Part 1) and assured by the Certified Emissions Measurement and Reduction Scheme (CEMARS).

How we measure our greenhouse gas emissions

A carbon footprint is calculated by converting all emissions of Kyoto Protocol gases into a carbon dioxide equivalent (tCO_2e). Emissions are categorised as direct, indirect or avoided emissions.

Direct emissions (scope 1 emissions) are those from activities we own or control including those from our treatment processes, company vehicles, burning of fossil fuels for heating and incineration of sewage sludge.

Indirect emissions, known as scope 2 and 3 emissions, result from operational activities we do not own or control. These include emissions produced as a consequence of electricity we purchase to power our treatment plants (scope 2) and other indirect emissions such as travel on company business (scope 3).

Avoided emissions are reductions from the purchase, or export, of renewable energy.

Gross emissions are the sum of all three scopes. Net emissions are the gross emissions minus reductions from avoided emissions.

The GHG Protocol recommends using two methods to quantify emissions – the 'location-based' method which uses average grid electricity emissions factors and the 'market-based' method which is specific to the actual electricity purchased. We report results using both methods and use the gross 'market-based' figure to report our headline emissions.

Key energy and carbon metrics 2019/20:

- 159,243 tCO2 E total greenhouse gas emissions
- 73% reduction from our 2005/06 baseline
- 191 GWh renewable energy generated – equivalent to 23.8 per cent of our electricity consumption
- 95% electricity consumption from renewable sources – 760.5 GWh
- 115,424 tCO2 e science-based target baseline (scope 1 and 2 net GHG emissions)

United Utilities' greenhouse gas emissions

		Current year 2019/20 tCO2e	2018/19 tCO2e(2)	Previous years 2017/18 tCO2e	Baseline year 2005/6 tCO2e
Scope 1 Direct emissions					
Direct emissions from burning of fossil fuels		17,129	16,809	14,324	17,638
Process emissions from our treatment plants – including refrigerants		84,048	88,136	91,456	125,032
Transport: company owned or leased vehicles		15,739	14,409	11,803	7,514
Total Scope 1 Direct emissions		**116,916**	**119,354**	**117,583**	**150,183**
Scope 2 Energy indirect emissions					
Grid electricity purchased – generation	Market based(1)	11,789	18,503	28,287	-
	Location based	164,521	187,171	230,167	357.660
Total Scope 2 Energy indirect emissions		**11,789**	**18,503**	**230,167**	**357,660**
Scope 3 Other indirect emissions					
Business travel (public transport and private vehicles)		2,123	2,236	2,504	2,374
Emissions from sludge and process waste disposal		27,410	26,186	23,048	42,712
Grid electricity purchased – transmission and distribution	Market based(1)	1,005	1,577	2,644	-
	Location based	13,967	15,955	21,520	33,088
Total Scope 3 Other indirect emissions		**30,538**	**29,999**	**47,072**	**78,174**
GROSS GHG EMISSIONS(2)		**159,243**	**167,856**	**394,822**	**586,017**
Avoided emissions from renewable electricity exported		(3,979)	(3,434)	(2,303)	(1,597)
Avoided emissions from biomethane exported		(9,302)	(8,446)	(8,577)	-
Avoided emissions from renewable electricity purchased	Location-based	-	-	(173,876)	-
Total avoided emissions		**(13,281)**	**(11,880)**	**(184,756)**	**(1,597)**
NET GHG EMISSIONS(3)		**145,962**	**155,976**	**210,066**	**584,420**

1. Market-based figures for electricity purchased on a standard tariff have been calculated using specific emissions factors from published generator fuel mix disclosures.

2. Operational emissions for 2005/06 and 2017/18 use the location-based method, 2018/19 and the current year use the market-based method.

3. Emissions from our regulated business have been estimated using the Water Industry Carbon Accounting Workbook V13 2020 v3 which encompasses the UK Government GHG Conversion Factors for Company reporting 2019.

United Utilities' greenhouse gas emissions intensity

As in previous years we state our emissions as tonnes CO2e per £million revenue. We also report the metric tonnes CO2e per megalitre (using the location-based method) broken down by clean water and wastewater, as these are common metrics for our industry.

		Current year 2019/20	2018/19	2017/18
Gross emissions per £m revenue	tCO_2e	85.7	92.3	225.6
Net emissions per £m revenue	tCO_2e	78.5	85.7	121.0
Regulated emissions per megalitre of treated water	Kg CO_2e/MI	27.19	38.22	60.43
Regulated emissions per megalitre of sewage treated	Kg CO_2e/MI	83.80	102.43	116.75

Energy use, generation and export

	2019/20 GWh	2018/19 GWh
Energy use		
Electricity	801.3	807.8
Gas	38.3	33.0
Other fuels(1)	144.4	135.0
Total energy use	**984.0**	**975.8**
Electricity purchased		
Renewable Tariff 0g CO_2e/kWh	602.9	601.5
Supplier Standard Tariff 28g CO_2e/kWh	40.8	59.7
Renewable energy generated		
CHP	121.5	115.7
Solar	42.6	115.7
Wind	5.7	4.8
Hydro	6.8(2)	4.6
Biomethane(3)	14.2	13.2
Total renewable energy generated	**190.8**	**172.9**
Renewable energy exported		
Electricity	18.1	13.0
Biomethane(3)	14.2	13.2
Total renewable energy exported	**32.3**	**26.2**

1. Energy use for other fuels includes fuel used in processing and transport plus business mileage in private vehicles converted to GWh using UK Government GHG Conversion Factors for Company Reporting.

2. Renewable energy from hydro includes Oswestry which was not incorporated into the emission reporting pending review of ROC.

3. Biomethane generated and exported to grid is expressed as an electricity equivalent.

Emissions and energy use

This year we consumed 984 GWh of energy including electricity, gas and other fuels purchased for use on-site and for transport. We increased generation across all our renewable sources of hydro, solar photovoltaics, wind, biomethane and energy recovery using sewage sludge to power combined heat and power (CHP) generators. We generated the equivalent of 191 GWh of renewable electricity, an increase of 18 GWh on last year and though we exported 6.1 GWh more we reduced our electricity purchased by 17.5 GWh.

Having largely addressed emissions from electricity, it is mostly methane and nitrous oxide emissions arising from wastewater treatment that remain. Understanding and reducing these emissions forms a long-term challenge for the industry as a whole.

Energy efficiency action taken

Our energy management strategy aims to achieve an appropriate balance between managing energy consumption, use of renewables and self-generation and being smart about how we operate our assets to get best value while maintaining security of supply.

We have continued to develop our Energy Management Programme which brings together processes, asset optimisation and data analytics. We have implemented a wide range of projects to reduce consumption and drive more dynamic control of our assets to reduce energy costs. To improve data capabilities we have rolled out an innovative sub-metering solution installing over 1,200 meters. Two major solar installations were completed with a combined capacity of 11.5 MW.

In the past year we completed our Energy Saving Opportunities Scheme (ESOS) submission to the Environment Agency which includes potential opportunities for efficiency and generation improvements. We were shortlisted for the Energy Institute Energy Management Award in November 2019.

Summary: good progress – ambitious, deliverable plans

We’ve been focused on climate change for over 20 years and have made good progress. We have committed to playing our part in limiting climate change to 1.5°C, we aim to maintain and improve services whether the climate change is 1.5°C, 2°C or 4°C, and we have the appropriate governance, strategy, risk management and metrics to make sure this happens.

Our performance in 2019/20

Operational performance

United Utilities delivered a robust set of financial results for the year ended 31 March 2020.

The best service to customers

Customer service: Putting customers at the heart of everything we do has helped us deliver substantial improvements in customer service in recent years, becoming the most improved company in the 2010–15 regulatory period with a reduction of over 70 per cent in the overall number of customer complaints.

We have continued to improve at a faster rate than the industry average in AMP6, positioning us as one of the leading water and wastewater companies. We outperformed against Ofwat’s SIM measure across the first four years of AMP6 (the measurement period) and have performed well this year against the shadow C-MeX pilots. We finished third out of the water and wastewater companies, and fourth out of the 17 companies in the sector in total, for the year overall. We finished first in the third and fourth quarter surveys of customers who have contacted us. This performance is mirrored in the number of complaints that we receive. Since 2015/16 we have seen a 41 per cent reduction in complaints and a 65 per cent reduction in repeat complaints.

During AMP6, we have developed new services that increase the speed and quality of the customer service we provide. These include a new system that enables us to proactively keep customers informed of events on our network, increasing the hours we are available for customers to contact us, and increasing the channels by which they can contact us so they do not always need to call.

We have driven an increase in digital engagement through a new customer-centric website, the introduction of an easy to use mobile app and a substantially enhanced social media presence on commonly used platforms such as Facebook and Twitter. In support of our most vulnerable customers we launched our Priority Services proposition, setting up dedicated teams for those that need it most, and now have over 100,000 customers registered.

We have received external recognition for the improvements that we have made in the quality of service that we deliver to customers. We are one of only 14 companies nationally to be awarded the Service Mark with Distinction from the Institute of Customer Service, the only water company to receive Shaw Trust Accessibility status for our website and the only water company to be awarded the 'Best Practice' Accreditation (CICMQ) from the Chartered Institute of Credit Management.

Leading north west service provider: We are consistently ranked in the top three out of ten leading organisations in the North West, through an independent brand tracker survey which is undertaken three times per year. This covers key attributes such as reputation, trustworthiness and customer service and in the most recent survey, we have been ranked first for being both environmentally and socially responsible. We are behind only Amazon and Aldi, and ahead of seven other major organisations across utilities, telecoms, media, banking and retail.

Robust water supply: Customers benefit from our robust water supply and demand balance, along with high levels of water supply reliability; although, with our water resources predominantly being from impounding reservoirs, we remain at risk from short intense dry periods of weather. Our overall water quality continues to be good, and our water quality service index and Mean Zonal compliance both slightly improved compared with the prior year. We have consistently delivered a reliable water service. Although we have experienced some water no-supply incidents in the 2015–20 regulatory period, our Systems Thinking approach and the largest water tanker fleet in the industry has resulted in sustainable year on year performance improvements.

Throughout February 2020 the UK experienced a succession of severe winter storms. Although the storms did cause some service interruptions, our workforce worked tirelessly throughout this period to minimise the impact on customers and the environment.

Reducing sewer flooding: We have continued to invest heavily in schemes, projects and programmes of work designed to reduce the risk of flooding of customers' homes, including incidence-based targeting on areas more likely to experience flooding and defect identification through CCTV sewer surveys and other innovative technologies. Our plan for the 2015–20 regulatory period included a target of reducing sewer flooding incidents by over 40 per cent, in line with customers' affordability preferences. During that period, we have delivered an average reduction of 38 per cent. Although marginally below our target, this represents strong performance given the unprecedented storm events over the five year period. In terms of internal repeat flooding (occurring more than once in ten years) we have delivered a reduction of over 70 per cent over AMP6.

Our final determination for the 2020–25 regulatory period includes a target of reducing internal sewer flooding by 73 per cent. Although a challenging target, we have invested some of our outperformance reinvestment in 2019/20 targeting improved performance in this area. Our wastewater network will continue to benefit from significant investment going forward in terms of innovative proactive targeting of operational flood risk and through ground-breaking monitoring of the sewer network which will be underpinned by artificial intelligence techniques to interpret and forecast flood risk. In addition, we will continue to seek to work in collaboration with other external flood authorities and associated partners, paying our fair share, to address the widespread flooding events that hit our region, as we aim to help mitigate the effect of changing weather patterns likely to result from climate change.

Key performance indicators:

Outcome delivery incentives (ODIs): We have 19 wholesale financial ODIs, ten of which are structured to provide the potential to earn a reward for good performance or for us to be penalised for poor performance. The other nine wholesale financial ODIs are structured in order to protect customers in key areas and do not offer a reward for good performance, only a penalty for poor performance.

In 2019/20 we have delivered another strong performance against our ODIs, resulting in a net outperformance payment of £22.4 million. During the year we achieved the final AMP6 milestone in relation to our West Cumbria project, earning an outperformance payment of £21.6 million. We are pleased with our overall AMP6 performance, having earned a total net outperformance payment of £43.9 million over the five-year period. This demonstrates the benefits of our targeted investment alongside our Systems Thinking approach and given the ODI targets have typically become tougher each year, it is particularly pleasing that our best performance has been achieved in the final two years of the AMP. This gives us confidence heading into AMP7.

Service incentive mechanism (SIM): We have previously stated our target was to move towards the upper quartile in the medium-term, and we are particularly pleased with the progress we have made over AMP6, ending the four year period to 2018/19 in fourth place overall for the water and wastewater companies and earning an outperformance payment of £6 million.

In AMP7, SIM will be replaced by a new customer service measure, C-MeX, with the industry reporting against C-MeX for the year 2019/20 (although not contributing to any outperformance or underperformance) before the measurement period begins in AMP7.

There are two elements to C-MeX, a contactor survey based on a survey of customers who have contacted the company and a perception survey of a random selection of individuals who may or may not have had a previous interaction with the company.

For the contactor element, we achieved first place (out of 17 companies) in each of the final two quarters. For the perception survey, we achieved eighth place in the fourth and final quarter. This means on the combined scores we were fourth in the final quarter and also fourth out of the 17 companies and third out of the water and wastewater companies for the year overall.

At the lowest sustainable cost

Power and chemicals: Our Systems Thinking approach and more effective use of operational site management continues to optimise power and chemical usage alongside combined heat and power assets to generate renewable energy. In addition to the electricity we generate from bioresources, we are developing other renewable energy facilities. This is primarily in the area of solar, where we have invested £62 million across the 2015–20 regulatory period. We continue to lock-in our power commodity costs, providing greater cost certainty for the next regulatory period.

Proactive network management: Through our Systems Thinking approach we are more proactive in the management of our assets and networks. We have improved our predictive modelling and forecasting through better use of sensors in our network and better analysis of other data, such as weather forecasting, enabling us to address more asset and network problems before they affect customers. This reduces the level of reactive work and improves our performance and efficiency.

Customer receipts and financial support: Our region suffers from high levels of income deprivation and we offer wide-ranging schemes to help customers struggling to pay. We now have 120,000 customers on affordability schemes, more than double the commitment we made at the start of AMP6. Notwithstanding our industry-leading debt management processes, we expect bad debt to continue to be a challenging area for us due to the level of deprivation in our region and the impact COVID-19 will have on the ability of customers to pay their bills.

Prior to any COVID-19 impact, our household bad debt expense had been maintained at the 1.8 per cent of revenue we communicated at the half year. This is a reduction from the 2.1 per cent last year, reflecting our ongoing attention to bad debt through initiatives such as our affordability schemes. At 31 March 2020, recognising the higher risk of future non-payment of household customer bills as a result of COVID-19, we have increased our reported bad debt expense by £17 million. Although this is excluded from underlying profit measures as an adjusted item, on a reported basis the impact is to increase household bad debt to 3.1 per cent of revenue.

Pensions: We have taken progressive steps to de-risk our pension provision. The group had an IFRS retirement benefit surplus of £754 million as at 31 March 2020, compared with a surplus of £484 million as at 31 March 2019. Further details of the group's pension provision are provided in the pensions section on pages 132-133 and 158-166.

In April 2019, the group accelerated £103 million of deficit repair contributions to its defined benefit pension schemes. This represents the final acceleration of deficit repair contributions agreed with the schemes' trustees and reduces the pension scheme deficit repair contributions due from the company down to £nil.

Capital delivery and regulatory commitments: We place great emphasis on delivering our commitments efficiently and on time, and have a robust commercial capital delivery framework in place. Across the 2015–20 regulatory period, we have worked with a single engineering partner and four design and construction partners to deliver our regulatory capital investment programme of just under £4 billion. We have involved our partners much earlier in project definition and have packaged projects by type, geography and timing in order to deliver efficiencies. Projects have been allocated on an incentive or competitive basis leading to our partners presenting a range of solutions, innovations and pricing.

We accelerated our 2015–20 investment programme in order to improve services for customers and deliver early operational and environmental benefits. Regulatory capital investment in 2019/20 was £722 million including £143 million of IRE, £184 million of additional investment made available through sharing our net outperformance and £13 million additional capex associated with the dry weather in the summer of 2018. This, combined with our investment in the first four years of the regulatory period, brings our total spend to just under £4.0 billion across the 2015–20 regulatory period.

We are driving more effective and efficient delivery of our capital programme and applying a tougher measurement mechanism to our time, cost and quality index (TCQi) score for this regulatory period. Despite this tougher approach, our TCQi score remains high at 95 per cent, representing very good performance.

Key performance indicators:

Total expenditure (totex) performance: Our totex allowance for the 2015–2020 regulatory period represented a significant challenge compared with the costs we originally submitted as part of our business plan. Not only have we closed the gap but we have now delivered the original scope for around £100 million less than our allowance. This has been achieved through a combination of driving efficiency into our capital programme and through Systems Thinking.

Financing outperformance: Our leading treasury management helped lock in a low cost of debt, delivering significant financing outperformance for the 2015–20 regulatory period compared with the industry allowed cost.

Household retail cost to serve: We have continued to deliver against a challenging benchmark set for AMP6. Our target has been to minimise our costs compared with our revenue allowance and on an underlying basis we have delivered a good performance in 2019/20, outperforming this year's revenue allowance (including margin) by around £13 million. This reflects underlying performance and therefore excludes an additional regulatory bad debt charge associated with the higher risk of future non-payment of household customer bills as a result of COVID-19. The statutory bad debt charge component of this (£17 million) is excluded from underlying profit measures as an adjusted item as outlined in the underlying profit measures table on pages 66 to 68. On an underlying basis, cost to serve is in line with the regulatory cost allowance of £35 per household and we are confident that our cost plans will move us towards upper quartile performance in AMP7.

In a responsible manner

Behaving responsibly is fundamental to delivering on our purpose, and the group has for many years included corporate responsibility factors in its strategic decision-making. Our environmental, social and governance performance across a broad front has received external recognition. Earlier in the year, we achieved a World Class rating in the Dow Jones Sustainability Index for the 13th consecutive year, again achieving industry leading performance status in the multi-utility/water sector. We look at our performance across a range of other environmental, social and governance (ESG) indices, where we also perform well.

Leakage: We have continued our strong operational focus on leakage, alongside our network resilience improvements and a range of initiatives such as active pressure management, acoustic loggers, satellite technology and the UK's first leakage sniffer dogs specially trained to pinpoint the exact location of leaks.

We continue to encourage customers to save water through water efficiency programmes as this enables them to help preserve this precious resource and can save money on their water bill.

Our final determination for 2020–25 assumes a 15 per cent reduction in leakage. Although a challenging target, we have invested some of our outperformance reinvestment in 2019/20 in our water network to help further improve our performance in this area.

Environmental performance: This is a high priority for us and an area where we have performed well, achieving Industry Leading Company status in the Environment Agency's annual assessment in three of the last four years. This is a result of our approach to managing our assets in an integrated way to minimise the number of environmental incidents.

Carbon footprint: We set a target to reduce our carbon footprint by 50 per cent by 2020 compared with a 2005/06 baseline ,and achieved this target a year early. A major contributor to this has been the purchase of certified renewable electricity, with over 95 per cent of the electricity we use having zero emissions. This year our total greenhouse emissions were 159,243 tonnes of carbon dioxide equivalent, a reduction of 73 per cent since 2005/06.

We generated the equivalent of 191 gigawatt hours, an increase of 18 gigawatt hours on the previous year. This illustrates good progress in our energy strategy to use less and generate more renewable energy.

We have committed to six climate change mitigation pledges – see page 51.

Employees: Our primary concern throughout the COVID-19 pandemic has been to protect the safety of our employees and those they work alongside. We have put safeguarding measures in place, distributed additional personal protective clothing and issued key worker cards to frontline employees to explain their presence in communities. We have not furloughed any employees and recognising that some may face challenging financial issues within their own families as a result of changing circumstances, we created a Staff Outreach Scheme to provide one-off grants through a confidential application process.

We continue to work hard to engage all of our employees in the transformation of the group's performance. Employee engagement was at 84 per cent this year, consistent with the UK high-performing norm. We remain committed to maintaining high levels of employee engagement.

We have been successful in attracting and retaining people and have continued with our apprentice and graduate programmes for 2019/20. We now have a total of 36 graduates and 102 apprentices across the business. Our investment in recruiting graduates and apprentices is already benefiting the company, with 269 employees who have previously been on either the graduate or apprentice scheme having secured permanent roles across our business.

Over the last 12 months all of our employees have attended health, safety and wellbeing training as part of our home safe and well programme, which has been designed to support colleagues understand how our individual decision-making and behaviour can ensure we look after ourselves and each other.

More than 300 colleagues then volunteered to become front line coaches and following their training are now 'peer influencing' colleagues to think again about the activities they are undertaking and consider if there is a safer way to do it. We are seeing a positive improvement in our performance.

Our employee accident frequency rate for 2019/20 was 0.110 accidents per 100,000 hours, representing a 27.6 per cent improvement on last year's outturn of 0.152. Our contractor accident frequency also showed improvement, with 0.083 accidents per 100,000 hours compared to 0.092 in 2018/19. We retained our Gold award status with the Royal Society for the Prevention of Accidents, achieving this status for the eighth year.

We are continuing our strong focus on health, safety and wellbeing and have undertaken extensive engagement across our business to enable the further development of our plans.

Communities: We continue to support partnerships, both financially and in terms of employee time through volunteering with other organisations across the North West. Our approach to integrated catchments helps to tackle water quality issues in lakes, rivers and coastal waters across the North West, and our LoveMyBeach contribution includes employees volunteering to help to keep our region's beaches tidy. We continue to support local communities through contributions and schemes such as providing debt advisory services, and our partnership with Beamont Collegiate Academy FabLab and STEM centre which will enable students from across the North West to gain first-hand experience of using hi-tech equipment and learn more about STEM in a fun and engaging way.

Key performance indicators:

Leakage: Although leakage is included within our outcome delivery incentives, we publish our leakage position separately, with it being an important measure from a corporate responsibility perspective. In 2019/20 we have again met our regulatory leakage target of 463 megalitres per day.

Environmental performance: In the Environment Agency's latest assessment, published in July 2019, we were awarded three stars (out of four) across a range of operational metrics. This is lower than our performance in the previous year where we were awarded the industry-leading 4 star status for the third consecutive year. Our lower score in the most recent assessment was primarily the result of a slight deterioration of performance against the delivery of our National Environment Programme where two projects were delivered late. The two projects were delayed due to unforeseen issues with land purchase, planning difficulties and complex interactions with a flood risk scheme. We have since made good progress with delivery and we are now operating the relevant assets in line with their new Environmental Permit requirements. We brought forward the delivery of two other major schemes to offset the environmental impact. Overall, our performance, earning industry-leading 4 star status in three of the last four years is in line with our medium-term goal of being an upper quartile company on a consistent basis.

Corporate responsibility: We are committed to operating in a responsible manner and are the only UK water company to have a World Class rating as measured by the Dow Jones Sustainability Index. For 2018/19, we achieved our World Class rating for the 13th consecutive year. We demonstrate a very strong performance across a number of leading corporate responsibility indices and report these publicly in our annual report and on our website; for example, we have been named in the FTSE4Good Index every year for the last 17 years, and reconfirmed as part of the Euronext Vigeo Index UK 20.

Our performance in 2019/20

Financial performance

In respect of our financial KPIs, we use underlying profit measures as these enable more meaningful comparisons of the year-on-year performance of our business.

	Year ended 31 March 2020	Year ended 31 March 2019
Financial KPIs		
Revenue	£1,819m	£1,819m
Underlying operating profit (1)	£744m	£685m
Underlying profit before tax (1)	£525m	£491m
Underlying profit after tax (1)	£456m	£439m
Gearing: net debt to regulatory capital value (2)	63%	61%
Performance summary		
Operating profit	£630m	£635m
Profit before tax	£336m	£467m
Profit after tax	£134m	£388m

Notes:
(1) Underlying profit measures have been provided to give a more representative view of business performance and represent non-GAAP measures that are reconciled to reported measures on page 68.
(2) Regulatory capital value or RCV gearing calculated as group net debt/United Utilities Water shadow RCV (out-turn prices).

Revenue

Revenue was up £41 million, at £1,859 million, largely reflecting our allowed regulatory revenue changes.

Consistent with Ofwat's annual wholesale revenue forecasting incentive mechanism (WRFIM), we have reduced revenue by £14 million in 2019/20 (outturn prices). This consists of two components; first reflecting actual volumes being higher than our original assumptions during AMP6, and secondly reductions relating to the 2014/15 'AMP5 blind year', which is £5 million in 2019/20.

The impact of COVID-19 has resulted in reduced consumption from businesses and has therefore reduced revenue by around £5 million in 2019/20 with a more significant impact likely in 2020/21. By way of illustration, for every 1 per cent per annum reduction in non-household consumption, revenue will reduce by around £4 million. However, a significant amount of uncertainty persists and therefore, at this point, it is difficult to predict the impact for 2020/21. Furthermore, shortfalls in revenue are recovered in future years under the regulatory revenue control.

Operating profit

Underlying operating profit at £744 million was £59 million higher than last year. This reflects the £41 million increase in revenue and a £22 million decrease in IRE partly offset by a £7 million increase in underlying depreciation. The remaining cost base has decreased by £4 million as a result of a £19 million decrease in property rates largely due to an £8 million refund received and an £8 million reduction in accrued property rates relating to wastewater assets, and smaller reductions across the rest of the cost base partly offset by a £10 million credit in the prior year resulting from the settlement of a historical commercial claim and a £9 million increase in power costs largely due to electricity price increases. During the current year operating costs of £3 million and infrastructure renewal expenditure of £4 million were incurred in response to Storms Ciara and Dennis that occurred in February 2020.

Reported operating profit decreased by £5 million, to £630 million, reflecting the increase in underlying operating profit being more than offset by an increase in adjusted items. Adjusted items for 2019/20 included £83 million of accelerated depreciation of bioresources assets that have been taken out of use. A further £19 million relates to costs associated with COVID-19, principally reflecting a higher bad debt charge recognising the higher risk of future non-payment of household customer bills, and £12 million relates to restructuring costs. In the prior year, adjusted items included £36 million of costs associated with the dry weather of 2018, £7 million associated with the equalisation of pension benefits between males and females in relation to Guaranteed Minimum Pension (GMP) benefits, and £7 million of restructuring costs.

Investment income and finance expense

The underlying net finance expense of £208 million was £8 million higher than last year, mainly due to the impact of new debt and interest rate swaps traded since March 2019, and higher RPI inflation on the group's index-linked debt.

Interest of £95 million on non index-linked debt was £11 million higher than last year due to a higher level of debt following new issuances and associated interest rate swaps traded in the period. The indexation of principal on index-linked debt, including the impact of inflation swaps, amounted to a net charge in the income statement of £100 million, compared with a net charge of £98 million last year. As at 31 March 2020, the group had approximately £3.5 billion of RPI-linked debt at an average real rate of 1.4 per cent, and £0.5 billion of CPI-linked debt at an average real rate of 0.2 per cent.

The higher RPI inflation charge compared with last year contributed to the group's average underlying interest rate of 3.4 per cent being higher than the rate of 3.3 per cent for the year ended 31 March 2019. The average underlying interest rate represents the underlying net finance expense divided by average debt.

Reported net finance expense of £256 million was £82 million higher than last year, principally reflecting an increase in the fair value losses on debt and derivative instruments, from a £9 million gain in 2018/19 to a £76 million loss in 2019/20 and the £5 million expected credit losses on our loans to Water Plus.

The group fixed the interest rates on the majority of its non index-linked debt for the 2015–20 regulatory period at a net effective nominal interest rate of around 3.2 per cent (excluding the impact of cost of carry).

Profit before tax

Underlying profit before tax was £525 million, £34 million higher than last year. This mainly reflects the £59 million increase in underlying operating profit, partly offset by the £8 million increase in underlying net finance expense and a £6 million share of underlying losses of joint ventures compared with a £7 million profit last year.

Our joint venture Water Plus has been operating in a challenging environment due to billing data issues stemming from the market opening in April 2017, and delivered a disappointing operating result for the year to March 2020. Prior to the onset of COVID-19, Water Plus had been making progress with its recovery plan but the impact COVID-19 has had on the ability of business customers to pay has resulted in a far more challenging operating environment for Water Plus. Our share of Water Plus losses for the year amounted to £51 million, of which £46 million has been recognised in the income statement, comprising our £14 million share of Water Plus underlying losses and our £32 million share of Water Plus losses arising as a result of COVID-19. As a result of the £46 million of losses recognised in the income statement, our long-term interest (comprising our equity investment in and zero coupon shareholder loans to Water Plus) has been written down to £nil. In addition we have recognised an allowance for expected credit losses of £5 million on our loans to Water Plus. Further detail is provided in note 12 (Joint Ventures) of our consolidated financial statements.

The underlying measure of profit before tax reflects the adjusted items, as outlined in the operating profit section above, the Water Plus adjustments, and other consistently applied presentational adjustments, as outlined in the underlying profit measures on pages 66 to 68.

Reported profit before tax decreased by £131 million to £336 million reflecting the £5 million reduction in reported operating profit, a £81 million increase in reported net finance expense including fair value movements and a £38 million share of losses of joint ventures compared with a £7 million share of profits last year.

Tax

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 secure the Fair Tax Mark in July last year.

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 5,000 strong workforce. The total payments for 2019/20 were around £250 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 2019/20, we paid corporation tax of £77 million, which represents an effective cash tax rate on underlying profits of 15 per cent, which is 4 per cent lower than the headline rate of corporation tax of 19 per cent. We paid six rather than the usual four quarterly instalment payments as we transition to the new quarterly instalment regime. After adjusting for these one off additional payments, the key reconciling items to the headline rate of corporation tax continue to be allowable tax deductions on capital investment and pension payments, these being deductions put in place by successive governments to encourage such investment and thus reflecting responsible corporate behaviour in relation to taxation.

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. The key risk to sustaining this rate is any unexpected changes in tax legislation or practice and, as necessary, we would actively engage with the relevant authorities in order to manage this risk.

As well as the payments we also received a repayment of corporation tax of £16 million which relates to agreement of prior years' UK tax matters.

The current tax charge was £57 million in 2019/20, compared with £47 million in the previous year. There were current tax credits of £12 million in 2019/20 and £3 million in 2018/19, following agreement of prior years' tax matters.

For 2019/20, the group recognised a deferred tax charge of £158 million, compared with £34 million for 2018/19. Of the total deferred tax charge for 2019/20, £136 million relates to the government's reversal of the planned reduction in the rate of corporation tax from 19 per cent to 17 per cent from 1 April 2020. Excluding the deferred tax adjustment for the change in tax rate of £136 million in the current year, the total effective tax rate was around 20 per cent for the current year and around 17 per cent for the prior year.

Subject to any legislative or tax practice changes, we would expect the total effective tax rate to be in line with the headline rate of corporation tax for the medium-term.

In 2019/20, there are £157 million of tax adjustments taken to equity, primarily relating to remeasurement movements on the group's defined benefit pension schemes – including the adjustment arising from a change in the rate at which the deferred tax liabilities are measured, from 17 per cent to 35 per cent, being the rate applicable to refunds from a trust.

Profit after tax

Underlying profit after tax of £456 million was £17 million higher than last year, principally reflecting the £34 million increase in underlying profit before tax.

For 2019/20 we have changed the approach we use to derive underlying profit after tax to exclude the impact of deferred tax. This approach is in line with the regulatory model whereby cash tax is 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. This approach is consistent with the approach taken by our listed peers and with what we believe to be the direction of travel of the International Accounting Standards Board's (IASB) rate-regulated activities project. Our prior year numbers have been restated for comparability.

Reported profit after tax decreased by £254 million to £134 million, principally reflecting the £131 million decrease in the reported profit before tax and a £124 million increase in the reported deferred tax charge largely resulting from the Government's reversal of the planned reduction in the rate of corporation tax from 19 per cent to 17 per cent from 1 April 2020.

Financial stability

The water industry has invested significant capital since privatisation in 1989 to improve services for customers and provide environmental benefits, a large part of which is driven by legislation. Water companies have typically raised borrowings to help fund the capital investment programme. Part of total expenditure is additive to the regulatory capital value, or RCV, on which water companies earn a regulated level of return. RCV gearing is useful in assessing a company's financial stability in the UK water industry and is one of the key credit metrics that the credit rating agencies focus on. We have had a relatively stable RCV gearing level over the last ten years, always within our target range of 55 to 65 per cent, supporting a stable A3 credit rating for UUW with Moody's. RCV gearing at 31 March 2020 was 63 per cent. Given the level of uncertainty associated with the economic impact of COVID-19, and specifically the future outlook for inflation, it is probable that our RCV gearing will increase above its current level and we will therefore continue to monitor the position as greater clarity emerges.

Cash flow

Net cash generated from continuing operating activities for the year ended 31 March 2020 was £802 million, and therefore broadly consistent with £817 million in the previous year. The group's net capital expenditure was £594 million, principally in the regulated water and wastewater investment programmes. This excludes infrastructure renewals expenditure which is treated as an operating cost under IFRS. Cash flow capex differs from regulatory capex, since regulatory capex includes infrastructure renewals expenditure and is based on capital work done in the period, rather than actual cash spent.

Net debt including derivatives at 31 March 2020 was £7,442 million, compared with £7,162 million at 31 March 2019. This increase largely reflects regulatory capital expenditure, payments of dividends, interest and tax, the inflationary uplift on index-linked debt, fair value movements and the impact of IFRS16 resulting in a non-cash increase in lease liabilities, partly offset by operating cash flows and a repayment of loans owed from joint ventures.

Fair value of debt

The group's gross borrowings at 31 March 2020 had a carrying value of £8,442 million. The fair value of these borrowings was £8,912 million. This £470 million difference principally reflects the significant fall in real interest rates compared with the rates at the time we raised a portion of the group's index-linked debt. This difference has decreased from £1,0090 million at 31 March 2019 due primarily to an increase in credit spreads.

Debt financing and interest rate management

Gearing, measured as group net debt divided by UUW's shadow (adjusted for actual spend) regulatory capital value, was 63 per cent at 31 March 2020. This is slightly higher than the 61 per cent as at 31 March 2019 and remains within our target range of 55 to 65 per cent.

UUW's senior unsecured debt obligations are rated A3 with Moody's Investors Service (Moody's), A- with Fitch Ratings (Fitch) and BBB+ with Standard & Poor's Ratings Services (S&P) and all on stable outlook. United Utilities PLC's (UU PLC) senior unsecured debt obligations are rated Baa1 with Moody's, A- with Fitch and BBB- with S&P, all on stable outlook.

The group has access to the international debt capital markets through its €7 billion euro medium-term note (EMTN) programme. The EMTN programme does not represent a funding commitment, with funding dependent on the successful issue of the notes.

Gross debt – total carrying value £8,363 million

Cash and short-term deposits at 31 March 2020 amounted to £528 million. Over 2015–20, we had a financing requirement totalling around £2.5 billion. This was fully funded before the end of the AMP with subsequent finance raised prefunding our AMP7 requirement. In total over 2020–25, we expect to raise around £2.1 billion to cover refinancing and incremental debt, supporting our five-year investment programme.

We remain one of the sector leaders in the issuance of CPI-linked debt having previously achieved CPI-linkage on £465 million of our debt portfolio, in response to Ofwat's decision to transition away from RPI inflation linkage. In November 2019, we increased the CPI-linkage in our debt portfolio by a further £50 million (to £515 million) by increasing the amount outstanding on UUW's financing subsidiary, United Utilities Water Finance PLC's (UUWF) £250 million public bond with a maturity date in July 2033, by an additional £50 million and simultaneously swapping to CPI.

In February 2020, UUWF raised £250 million 1.75 per cent fixed rate notes in the public bond market with an 18-year maturity. Since September 2019, the group has extended a £50 million committed bank facility by one year out to 2024, and £100 million of facilities by one year out to 2025. In addition, since March 2020, the group has renewed £50 million of committed bank facilities for a five-year term, and extended a £100 million facility for approximately a further three years to April 2026.

Long-term borrowings are structured or hedged to match assets and earnings, which are largely in sterling, indexed to UK price inflation and subject to regulatory price reviews every five years.

Long-term sterling inflation index-linked debt provides a natural hedge to assets and earnings. At 31 March 2020, approximately 48 per cent of the group's net debt was in RPI-linked form, representing around 30 per cent of UUW's regulatory capital value, with an average real interest rate of 1.4 per cent. A further 7 per cent of the group's net debt was in CPI-linked from, representing around 4 per cent of UUW's RCV, with an average real rate of 0.2 per cent. The long-term nature of this funding provides a good match to the company's long-life infrastructure assets and is a key contributor to the group's average term debt maturity profile, which is around 18 years.

Our inflation hedging policy is to target around 50 per cent of net debt to be maintained in index-linked form. This reflects a balanced assessment across a range of factors.

Where nominal debt is raised in a currency other than sterling and/or with a fixed interest rate, the debt is generally swapped to create a floating rate sterling liability for the term of the debt. To manage exposure to medium-term interest rates, the group fixes underlying interest costs on nominal debt out to ten years on a reducing balance basis.

Historically, this has been supplemented by fixing substantially all remaining floating rate exposure across a forthcoming regulatory period around the time of the price control determination. Recognising Ofwat's intention to apply debt indexation for new debt raised during the 2020–25 regulatory period, we have retained the hedge to fix underlying interest costs on nominal debt out to ten years on a reducing balance basis, but have not supplemented this with the additional ‘top up’ fixing at the start of the new regulatory period.

Liquidity

Short-term liquidity requirements are met from the group’s normal operating cash flow and its short-term bank deposits and supported by committed but undrawn credit facilities. The group’s €7 billion EMTN programme provides further support.

At 31 March 2020, the group had around £1.2 billion of available liquidity, comprising cash and short-term deposits (enhanced by new finance raised in the period), plus committed undrawn revolving credit facilities. Of this, £722 million covers short-term debt and debt maturities which fall due across the next 12 months. After taking this into account, the group has headroom of £436 million, providing flexibility in terms of when and how further debt finance is raised to help refinance maturing debt and support the delivery of our regulatory capital investment programme. The group plans to raise between £500 million and £800 million of term funding in 2020/21 and the group has recently re-established a Euro Commercial Paper Programme, which would facilitate access to the Bank of England’s Covid Corporate Financing Facility (CCFF), should the group need to do so. The Bank of England has confirmed our eligibility to participate in the CCFF. Whilst we do not expect to use this facility, we see it as prudent contingency planning to have it available to the group.

We consider that we operate a prudent approach to managing banking counterparty risk. Counterparty risk, in relation to both cash deposits and derivatives, is controlled through the use of counterparty credit limits. Our cash is held in the form of short-term money market deposits with prime commercial banks.

We operate a bilateral rather than a syndicated approach to our core relationship banking facilities. This approach spreads maturities more evenly over a longer time period, thereby reducing refinancing risk and providing the benefit of several renewal points rather than a large single refinancing requirement.

Pensions

As at 31 March 2020, the group had an IAS 19 net pension surplus of £754 million, compared with a net pension surplus of £484 million at 31 March 2019. This £270 million increase is as a result of the acceleration of £103 million deficit repair contributions to the group’s defined benefit schemes made in April 2019, and a spike in credit spreads at 31 March 2020 due to COVID-19 that resulted in a temporary decrease in the valuation of liabilities. 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 and is hedged for inflation and interest rates. Any inflation and credit spread movements are therefore not expected to have a material impact on the pension liabilities calculated on a scheme specific funding basis.

Further detail on pensions is provided in note 19 (Retirement benefit surplus) of our consolidated financial statements.

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 under International Financial Reporting Standards (IFRSs) as adopted by the European Union in the group’s consolidated income statement, which can be found on page 101. 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.

Adjustments in arriving at underlying profit measures

Dry weather event	An extreme period of hot and dry weather during the summer of 2018 led to significant strain being placed on our water resources and network and as a result our reservoir levels ran extremely low. Activities were carried out to safeguard supplies, generating significant costs which would not have been incurred under normal conditions. Given the infrequent nature of periods of dry weather of this severity, this event is not considered part of the normal course of business.
GMP equalisation	The group has recognised an additional past service cost in respect of its defined benefit pension schemes. This reflects a change in benefits following a legal ruling during the year relating to the equalisation of Guaranteed Minimum Pension (GMP) benefits between males and females. This one-off adjustment, which is not representative of costs incurred in the normal course of business, is a direct consequence of the ruling and is not expected to reoccur in future years.
Bioresources asset write-down	Following a strategic review of the group's bioresources activities, the likelihood of future economic benefit being derived from certain assets is now considered remote in light of improvements in alternative lower-cost and more environmentally friendly processes. This has resulted in a material asset write-down resulting from a strategic review coming out of the PR19 process and that considers the group's zero-carbon commitments. As such, it is not considered to be part of the normal course of business, with similarly material write-downs not expected to reoccur in future years.
COVID-19	The group has incurred significant costs resulting from the COVID-19 pandemic, including incremental expected credit losses on household and non-household customer receivables caused by the economic impact of business closures and expected increases in unemployment, and operating expenses relating to the response to the pandemic. The group's joint venture, Water Plus, has also been significantly impacted by the pandemic, resulting in the business recognising an impairment of certain assets and a higher allowance for expected credit losses, which feeds through to the group's share of losses from joint ventures. This has also caused the group to recognise an allowance for expected credit losses in relation to loans extended to Water Plus. Due to the unprecedented nature of the pandemic and the associated economic shock in the current year, these costs are not deemed to be representative of normal business performance when compared against prior periods.
Restructuring costs	The group has incurred restructuring costs in the past in relation to a number of discrete events which can cause volatility in the reported results. Management adjusts internally for these costs to provide an underlying view of performance which it views as being more representative of the normal course of business and more comparable period to period.
Net fair value losses/(gains) on debt and derivative instruments	Fair value movements on debt and derivatives can be both very significant and volatile from one period to the next. These movements are determined by macro economic factors which are outside the control of management and these instruments are purely held for funding and hedging purposes (not for trading purposes). Taking these factors into account, management believes it is useful to adjust for this to provide a more representative view of performance.
Interest on derivatives and debt under fair value option	Net fair value gains on debt and derivative instruments includes interest on derivatives and debt under fair value option. In adjusting for net fair value gains on debt and derivatives, 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.
Net pension interest income	This item can be very volatile from one period to the next and it is a direct function of the extent to which the pension scheme is in an accounting deficit or surplus position. Management believes it is useful to adjust for this to provide a more representative view of performance.
Capitalised borrowing costs	Accounting standards allow for the capitalisation of borrowing costs in the cost of qualifying assets. Management believes it is appropriate to adjust for these significant costs to provide a representative cost of borrowings and current year performance which is better aligned to the return on capital it earns through revenue.
Deferred tax adjustments	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. This adjustment has been made for the first time in the current year, with prior year comparatives re-presented to take account of this adjustment.
Agreement of prior years' tax matters	The agreement of prior years' tax matters can be significant, volatile and often related to final settlement of numerous prior year periods. Management adjusts for this to provide a more representative view of the tax charge/credit in relation to current year performance.

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.

	Year ended 31 March 2020	Year ended 31 March 2019
Operating profit	£m	£m
Reported operating profit	630.3	634.9
Dry weather event	-	36.1
GMP equalisation	-	6.6
Bioresources asset write-down	82.6	-
COVID-19 – expected credit loss on non-household receivables	1.4	-
COVID-19 – expected credit loss on household receivables	16.7	-
COVID-19 – operating expenses	1.1	-
Restructuring costs	11.8	7.2
Underlying operating profit	743.9	684.8
Net finance expense		
Investment income	56.9	47.6
Finance expense	(307.9)	(222.5)
Allowance for expected credit losses – loans to joint ventures	(5.0)	-
Reported net finance expense	(256.0)	(174.9)
COVID-19 – expected credit losses on loans to JVs	5.0	-
Net fair value losses/(gains) on debt and derivative instruments	76.3	(9.5)
Interest on derivatives and debt under fair value option	16.5	30.6
Net pension interest income	(14.0)	(9.5)
Capitalised borrowing costs	(40.6)	(37.4)
Underlying net finance expense	(207.8)	(200.7)
Reported share of (losses)/profits of joint ventures	(38.1)	6.7
COVID-19 – Water Plus impairment losses and expected credit losses	32.0	-
Underlying share of (losses)/profits of joint ventures	(6.1)	6.7
Reported profit before tax	336.2	466.7
Adjustments in respect of operating profit	113.6	49.9
Adjustments in respect of net finance expense	43.2	(25.8)
Adjustments in respect of (losses)/profits of joint ventures	32.0	-
Underlying profit before tax	525.0	490.8
Reported profit after tax	**133.6**	**388.1**
Adjustments in respect of profit before tax	188.8	24.1
Deferred tax adjustment*	157.5	34.0
Agreement of prior years' UK tax matters	(12.2)	(2.8)
Tax in respect of adjustments to underlying profit before tax	(11.3)	(4.6)
Underlying profit after tax*	456.4	438.8

* Approach used to derive underlying profit after tax has been changed to exclude the impact of deferred tax to better reflect the regulatory revenue allowances, with prior year numbers restated for comparability.

Our risk management

Principal risks and uncertainties

Successful management of risks and uncertainties enables us to deliver on our purpose to provide great water and more for the North West.

Our approach to risk management

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:

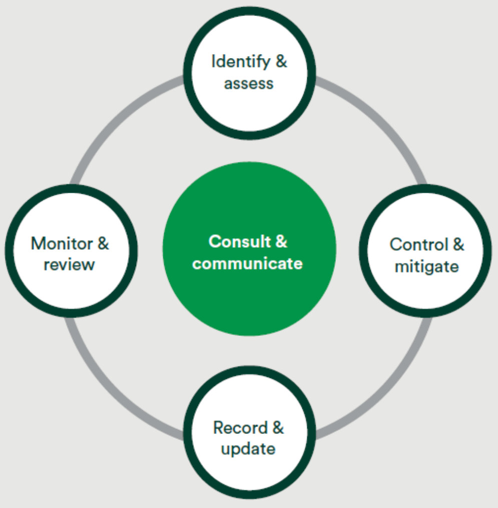
- The best service to customers;
- At the lowest sustainable cost;
- In a responsible manner.

From this starting point our emphasis is on our capacity and capability to manage risk and uncertainty, and to build and maintain long-term resilience across the corporate, financial and operational structures of the group.

Our risk management framework provides the foundation for the business to anticipate threats to delivering an effective service. In addition, our approach enables us to understand the new and emerging circumstances that present themselves in unstable and challenging times. Key components of the framework include:

- An embedded group-wide risk management process that is aligned to ISO 31000:2018;
- 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
- A portfolio of policies, procedures, guidance and training to enable consistent, group-wide participation by our people.

Figure 1: Assessment and management process



How we identify and assess risk

The risk profile is commensurate with the issues and opportunities inherent to our operations as a listed water and wastewater business, and takes into account our statutory and regulatory obligations as well as the expectations of our stakeholders. In this way the profile illustrates risks that represent key elements of major end-to-end processes or systems, in line with our Systems Thinking approach.

The assessment of individual risks considers both the internal and external business environment as well as the effectiveness of cross-business controls. Each risk is sponsored by a senior manager who is responsible for the assessment of the risk, and for implementing preventative and responsive controls, although accountability for different aspects of the controls may lie across various departments. Although operational and project level risk assessment occurs continuously throughout the year, the activity culminates in the biannual Business Unit Risk Assessment (BURA), which reviews the strategic and tactical level business risks that underpin our principal risks (as illustrated on pages 73 to 80). Each business risk is event based, with the assessment considering first the likelihood of the event occurring based on multiple causal factors, and secondly the full range of potential impacts and their severity should the event occur, from a minimum (best case) to a maximum (worst case) scenario.

All business areas are accountable for undertaking the BURA process, which is aligned to the full and half-year reporting cycle. The process involves group level evaluation, benchmarking and calibration to enable a consistent approach, an appreciation of the most significant risks from a financial and reputational context, and an assessment of how these relate to our risk appetite.

Oversight and governance process

The board ensures that its oversight of risk remains effective through a number of established reporting routes.

Twice yearly the board receives a full 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, and emphasises the most significant risks in both their current state relative to the risk appetite, and target state of acceptable exposure. This practice is in compliance with the UK Corporate Governance Code, and enables reports to be provided to the board for each full and half-year statutory accounting period. The board is therefore able to:

- Make decisions on the level of risk it is prepared to manage in order to deliver on the group's strategy;
- Engage with the business to put appropriate controls in place, and to ask questions 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 procedures, systems and risk management thinking.

The most significant risks reflect three categories: the ten highest business risk exposures (likelihood and impact) from across the group (see also pages 80 to 81); the ten highest risk exposures with an operational context; and risks that have a remote likelihood of occurrence but a significant impact should they occur. The board is advised of significant new or emerging risks pending assessment, risks which carry serious reputational impact, and those which would not otherwise be reported under the criteria described above, but because of associated uncertainty are kept under a watching brief.

Risk-specific governance and steering groups provide a picture of ongoing individual risks, and these feed into the executive-led Group Audit and Risk Board (GARB), which focuses on governance, risk and compliance.

The audit committee is 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 considered by the board.

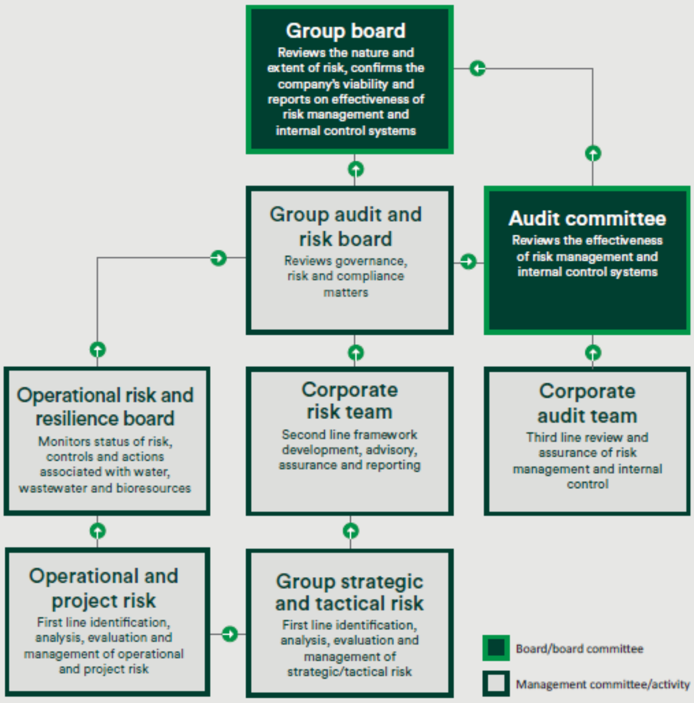
Our approach is in accordance with the UK Corporate Governance Code and incorporates reporting to the group board for every full and half-year statutory accounting period. This enables the board to:

- Determine the nature and extent of the principal risks it is willing to take in achieving its strategic objectives;
- Oversee the management of those risks and provide challenge to executive management where appropriate;
- Express an informed opinion on the long-term viability of the company; and
- Monitor risk management and internal control systems and review their effectiveness.

Figure 2: Governance and reporting process

Our approach is in accordance with the UK Corporate Governance Code and incorporates reporting to the group board for every full and half-year statutory accounting period. This enables the board to:

- Determine the nature and extent of the principal risks it is willing to take in achieving its strategic objectives;
- Oversee the management of those risks and provide challenge to executive management where appropriate;
- Express an informed opinion on the long-term viability of the company; and
- Monitor risk management and internal control systems and review their effectiveness.



Key developments

Continuous improvement is a key feature of our business risk management framework. In recent years we have matured fundamental aspects of our enterprise-wide risk management approach. This has been delivered through focusing on inherent risk, cross-business assessment of control, response and recovery, as well as prevention and consideration of extreme impacts in addition to more routine impacts. These fully align to our business-wide initiatives for Systems Thinking and resilience, and going forward we will continue to support the maturity of these through the further embedment of the Business Risk Management Framework.

Aligned to this approach is the introduction of a separate New and Emerging Risk forum over the last 12 months. This takes place in addition to the BURA process to ensure that changing circumstances from both the external and internal business environments are taken into account, and we continue to consult with external bodies to keep up to date with potential threats to the sector. In January 2020 we undertook a cross-business assessment of insider risk with the Centre for the Protection of National Infrastructure (CPNI). We have recently set up a dedicated anti-fraud forum to understand potential threats and impacts, and to develop mitigation strategies.

We have carried out a review of the National Risk Register for Climate Change to cross reference our own risk profile and use the assessment parameters to reassess our existing risks in the longer term. This has better enabled us to understand potential impacts and determine future strategies and associated funding requirements.

As a utility company we take part in multi-agency partnerships via Local Resilience Forums (LRFs) and in November 2018 we developed a specific pandemic plan to provide support to our well-established incident management process. This plan has been the basis for our COVID-19 incident management team, which was established in January 2020 to maintain our key operations during the incident, and to promote and support government advice on containment, delay and social distancing.

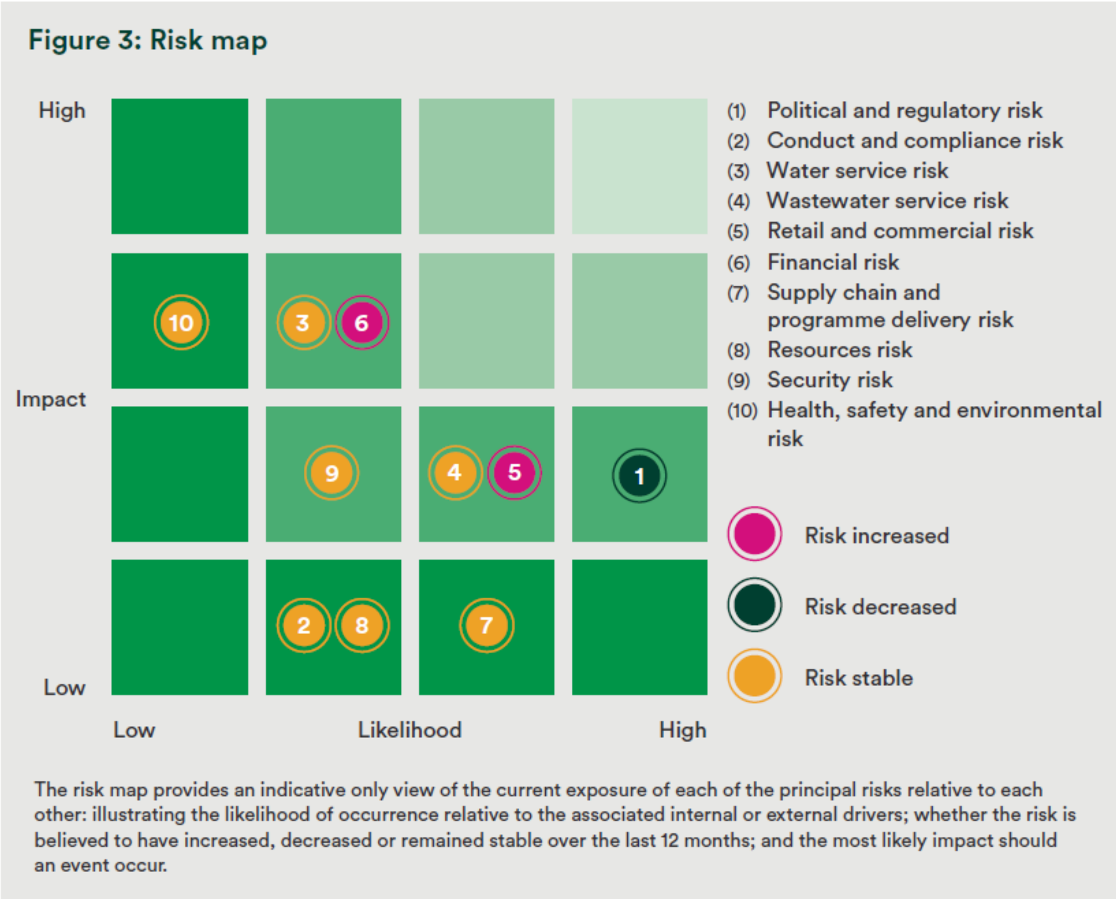
Profile features

Our business risk profile, underpinning the principal risks, consists of approximately 100 risks. Although the profile (as reported to the board) remains relatively static in terms of its headline inherent risk factors, the detail reflects the changing nature of the political and regulatory environment, the transition between the regulatory Asset Management Periods (AMPs), and emerging circumstances including those associated with COVID-19.

From a political and regulatory perspective the final determination in December 2019 saw the crystallisation of tougher targets and penalty/outperformance payment structures for operational risks. While we accepted the final determination, four companies have made a referral to the Competition and Markets Authority (CMA) which has potential implications for the sector as we start to look at the next price review (PR24). The General Election, which took place in December 2019, ended the immediate threat of nationalisation for the water sector and better informed some uncertainties around Brexit. Despite this, uncertainty remains in respect of perceptions of sector legitimacy and Brexit, including the potential for no suitable trade deal with the EU and the potential implications for our supply chain, particularly chemicals.

Looking more closely at operational and programme delivery risk, the transition between AMPs is particularly relevant for our capital programme. This involves AMP6 closedown work and related AMP7 early start, working with new partners and contractors, and delivering novel approaches. This will include the new Direct Procurement for Customers (DPC) methodology and model, which we are utilising for our scheme to replace sections of the Haweswater Aqueduct. While DPC is Ofwat’s favoured approach for certain types of qualifying large projects of significant spend, it brings a number of uncertainties, risks and challenges, including achieving value for money, contract terms and risks, and the effect on the remainder of our operations and financial structures (including our capital structure). Another key change for AMP7 is the introduction of a new customer measure of experience (C-MeX), which looks beyond direct customer experience of operational activity to a broader perception of the company and brand orientation. Climate change remains a key focus area, especially because of its impact on our water resources, asset base and operations, and on the environment that we strive to protect and enhance. Our commitment to the principles set by the Financial Stability Board’s Task Force on Climate-related Disclosures is described in detail on pages 45 to 53.

The COVID-19 pandemic has radically changed global economies, compounding a number of the risk exposures already captured within this business risk profile. These include risks in relation to financing performance, revenue and cash collection, and supply chain and operational delivery risks for water and wastewater. As well as considering our existing risks, we work with our trade body (Water UK) to understand additional potential scenarios, their associated implications and to plan mitigation.



Principal risks

We have set out over the following pages the principal risks that could have a material impact on the group's business model, future performance, solvency or liquidity and reputation. These principal risks are a combination of event-based risks and a description is provided as to how they might cause losses or gains to arise. Areas of potential exposure are illustrated and mitigating controls described. The tables set out individual matters that are currently significant risks, issues or areas of uncertainty, and which could affect our overall risk exposure.

Risk exposure

Regulatory and legal

(1) Political and regulatory risk (decreased)

Developments connected with the political and regulatory environment, including changes to legislation.

Main strategic theme

At the lowest sustainable cost

Principal/significant impacts

- In view of the current global impact of COVID-19 and the government's response to it, there is the potential for the costs of administration to increase, for sources of income and funding to be impacted and for greater uncertainty of returns as well as increased uncertainty within the debt and equity markets causing blockages to the raising of finance and the refinancing of debt in the medium to long term;

- Continuing challenges in relation to perceptions of legitimacy of the water industry leading to increased scrutiny from parliament, regulators and customers; and
- The beginning of AMP7 from April 2020 and the delivery of our new business plan in a period of great uncertainty.

Management and mitigation

We continue to take part in government and regulatory consultations, despite the uncertain conditions associated with COVID-19, in order to influence outcomes in respect of policy and legislation. Our communications with customers continue so that their needs and expectations can be factored into our thinking.

Current key risks, issues and uncertainties

- The global COVID-19 pandemic and its impact on the stability and certainty of regulation;
- Challenges to the legitimacy of the water industry;
- Ofwat’s final determination and the commencement of AMP7;
- Greater regulatory scrutiny of competitive markets; and
- Ongoing and new impacts of Brexit, including the effects on regulatory and legislative regimes.

(2) Conduct and compliance risk (stable)

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

Main strategic theme

In a responsible manner

Principal/significant impacts

Failure to comply with legal obligations could lead to financial penalties, reputational harm and loss of customer and investor confidence. Fines up to 10 per cent of group turnover could be imposed, particularly in the areas of environmental, health and safety, competition and information and data security. Ultimately sanctions could include revocation of the instrument of appointment (licence) and the imposition of a special administration regime.

Management and mitigation

Despite the influence of COVID-19 on all our activities, we continue to place high importance and focus on corporate responsibility. Our well established internal forums and our work with communities, landowners, environmental groups and other stakeholders allow us to remain engaged with and be aware of issues and concerns including ethical supply chains, modern slavery risks, the needs of vulnerable customers and diversity and equality within our own employee population. We monitor closely all legislative and regulatory developments, including, in particular, the ongoing passage of the Environment Bill and the frameworks regulating water quality, sludge and industrial emissions. The revised requirements introduced by such changes are incorporated into our operations and approach by means of policy, training and working practices. We work with our regulators but challenge them in a constructive and cost-effective manner where appropriate, and we defend litigation involving third parties and seek recoveries of outlay and losses.

Current key risks, issues and uncertainties

- Developing competitive markets;
- Material litigation;
- Tighter regulation of personal data (including GDPR); and
- Significant fines for non-compliance.

Core operations and service provision

(3) Water service risk (stable)

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.

Main strategic theme

The best service to customers

Principal/significant impacts

- Danger to public health caused by poor water quality;
- The impact on communities caused by interruptions to water supply; and
- Covid-19 restrictions affecting construction activity.

Management and mitigation

As a critical supplier we have continued to deliver on our essential water supply duties during the COVID-19 pandemic. Our centralised planning capabilities, use of Systems Thinking, risk assessment, quality assurance and testing processes enable us to maintain a resilient service. Our business plan for AMP7 contains necessary capital programmes to enhance and maintain our service to customers.

We embrace innovation and are working on projects to ensure security of supplies in the long term. The continuation of our 25-year Water Resources Management Plan enables the delivery of sustainable and secure water supplies, taking into account risk factors including climate change, scarcity of supplies and population growth.

Current key risks, issues and uncertainties

- Failure of supply and distribution system;
- Scarcity of supplies;
- Drought;
- Population growth;
- Adverse weather events;
- Stricter regulation of abstraction activities;
- Uncertainty of global supply chain in the light of Brexit; and
- COVID-19 and its effect on the supply chain and our construction activities.

(4) Wastewater service risk (stable)

A failure to remove and treat wastewater.

Main strategic theme

The best service to customers

Principal/significant impacts

Pollution incidents, interruptions to drainage services and sewer flooding could lead to damage to the natural environment, disruption to businesses and domestic customers and could result in significant fines and reputational harm. The evolving markets of bioresources and sludge treatment introduce uncertainty. COVID-19 restrictions have affected construction activity.

Management and mitigation

Our innovative and efficient business processes, including Systems Thinking, centralised planning and control, quality assurance, risk management, sampling and monitoring of discharge consents enable a proactive and predictive approach to controlling and minimising incidents. Our business plan for AMP7 contains necessary capital programmes to maintain and enhance our service to customers.

Current key risks, issues and uncertainties

- Failure of networks;
- Failure to treat wastewater;
- Adverse weather events and their effect on the capacity of the sewer network;
- Pollution events;
- Odour nuisance;
- Population growth and its impact on existing infrastructure;
- Significant environmental fines;
- COVID-19 and its effect on the supply chain and our construction activities;
- Changes to the regulatory regime; and
- Effects of Brexit on the chemicals supply chain.

(5) Retail and commercial risk (increased)

Failing to provide good and fair service to domestic customers and third-party retailers or a failure of or issue in relation to non-United Utilities Water operations or businesses (including Water Plus).

Main strategic theme

The best service to customers

Principal/significant impacts

Particularly in the context of the economic downturn caused by the measures taken to control the COVID-19 pandemic, there is a risk of financial losses and an impact on profitability. This is associated with poor cash flow, an increase in bad debt, potential regulatory penalties and reputational harm, including as a result of decreased customer satisfaction.

Management and mitigation

Our customer-focused initiatives aim to drive excellent service and enhance the experience of all our customers. We have an award-winning Priority Services scheme for vulnerable customers and those needing help to pay, which has driven up our success in recovering charges in a personalised and sympathetic way. Bad debt risk is managed through the adoption of best practice collection techniques, segmentation of customers based on their credit risk profile and the use of data sharing where appropriate to better understand customers' circumstances to determine the most effective and collaborative collection and support activities. The wholesale business maintains processes, systems, data and organisational capacity and capability to deal fairly with market participants and the central market operator in the business retail market in order to generate and collect revenue. Similarly strong governance applies to non-United Utilities Water operations and businesses.

Current key risks, issues and uncertainties

- Competition in the bioresources, water and wastewater markets;
- Socio-economic deprivation in the North West;
- Effects of COVID-19 on customers' ability to pay;
- Economic downturn and the effect on domestic bad debt;
- C-MeX and D-MeX;
- Non-household retail competition and the ability to treat other participants equally;
- Wholesale revenue collection;

- The challenges associated with being involved in a joint venture water retail business (Water Plus) operating in a competitive environment; and
- Business retail customer payments, debt and bad debt during the period and aftermath of COVID-19.

Functional service and support

(6) Financial risk (increased)

Potential inability to finance the business appropriately.

Main strategic theme

At the lowest sustainable cost

Principal/significant impacts

- The COVID-19 pandemic has introduced significant uncertainty into global financial markets, exacerbating the potential for worse credit ratings, associated funding costs or reduced access to debt capital markets leading to lower liquidity and adversely impacting the economic return on the regulatory capital value (RCV); and
- Tax inefficiencies, under or over payment of tax, deflation, interest rates and energy prices and a potential worsening of the pension scheme funding position could all lead to a significant increase in costs to the group.

Management and mitigation

Significant liquidity and refinancing which is long term with staggered maturity dates to minimise the effect of short-term downturns. Counterparty credit exposure and settlement limits exist to reduce any potential future impacts. These are based on a number of factors, including the credit rating and the size of the asset base of the individual counterparty. The group employs hedging strategies to manage the impact of market fluctuations for inflation, interest rates and energy prices. Sensitivity analysis is carried out as part of the business planning process, influencing the various financial limits employed. Continuous monitoring of the markets takes place, including movements in credit default swap prices and movements in equity levels.

Current key risks, issues and uncertainties

- Failure to achieve AMP7 financing outperformance;
- COVID-19;
- Low inflation;
- Financial market conditions;
- Interest rates and funding costs due to economic uncertainty associated with Covid-19 and Brexit; and
- Paying an appropriate amount of tax.

(7) Supply chain and programme delivery risk (stable)

Potential ineffective delivery of capital, operational and change programmes/processes.

Main strategic theme

At the lowest sustainable cost

Principal/significant impacts

The potential failure to meet our obligations and customer outcomes, including DPC, resulting in an impact at future price reviews, negative reputational impact with customers and regulators. COVID-19 restrictions have challenged financial resilience in supply chains and created an impact on cash flow.

Management and mitigation

Supply chain management is utilised to deliver an end-to-end contract management service, including contract strategy, tendering and category management, which provides a risk-based approach and relationship management programme for suppliers. We prioritise our investment programmes, projects and integrated business and asset plans. We have created better alignment and integration between our capital delivery partners and engineering service providers including alignment with our operating model.

Our programmes and project management capabilities are well established with strong governance and embedded processes to support delivery, manage risks and achieve business benefits. We utilise a time, cost and quality index (TCQi) as a key performance indicator and enhance our performance through a dedicated programme change office to deliver change in a structured and consistent way.

Current key risks, issues and uncertainties

- New partnership structures and arrangements in AMP7;
- DPC, including early exit;
- Technical quality and innovation;
- Brexit and increased uncertainty of availability of materials sourced from Europe; and
- Effects of COVID-19.

(8) Resources risk (stable)

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

Main strategic theme

In a responsible manner

Principal/significant impacts

- The potential inability to recruit, retain or deploy knowledge and/or expertise;
- The potential inability to respond and recover due to non-resilient business activity; and
- COVID-19 could lead to significant staff absences, both through illness and covering of other essential roles.

Management and mitigation

Developing our people with the right skills and knowledge, combined with delivering effective technology to support the business meeting its objectives. Employees are kept informed regarding business strategy and progress through various communication channels. Training and personal development programmes exist for all employees in addition to talent management programmes and apprentice and graduate schemes. We focus on change programmes and innovative ways of working to deliver better, faster and more cost-effective operations. Resources are closely monitored because of COVID-19, with homeworking and safe site working practices being adopted. People with multiple skill sets are able to add resilience across the business.

Current key risks, issues and uncertainties

- Risks to health and safety of the workforce caused by COVID-19;
- Delivering required employee engagement;
- Personal development, talent management and succession planning; and
- Optimising technology and innovation.

Hazard-based

(9) Security risk (stable)

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

Main strategic theme

In a responsible manner

Principal/significant impacts

- The potential for a loss of data/information and the consequent effect on service provision; and
- The potential for catastrophic damage to our property, infrastructure and non-infrastructure and the consequent effect on service provision.

Management and mitigation

Physical and technological security measures and awareness training combined with strong governance and inspection regimes aim to protect infrastructure, assets and operational capability. Externally, we work closely with our industry peers, the Centre for the Protection of National Infrastructure (CPNI), the National Cyber Security Centre (NCSC), the Drinking Water Inspectorate and Defra to shape the sector approach to security, particularly cyber security, and to understand how we can best deliver the appropriate levels of protection to our business and in compliance with the Network and Information Systems Directive (NIS). Ongoing system and network integration improves operational resilience and we maintain robust incident response, business continuity and disaster recovery procedures. We maintain insurance cover for loss and liability, and the instrument of appointment (licence) of the regulated business also contains a ‘shipwreck’ clause that, if applicable, may offer a degree of recourse to Ofwat/customers in the event of a catastrophic incident.

Current key risks, issues and uncertainties

- Cybercrime, particularly during the COVID-19 pandemic;
- Terrorism;
- Fraud; and
- Ownership of Critical National Infrastructure and National Infrastructure.

(10) Health, safety and environmental risk (stable)

Potential harm to people (employees, contractors or the public) and the environment.

Main strategic theme

In a responsible manner

Principal/significant impacts

- The effects of COVID-19 on employees, contractors and customers;
- The potential for serious injury or loss of life in remote, extreme circumstances;
- The potential for catastrophic damage to private, public or commercial property/infrastructure including the consequent effect on water and wastewater service provision; and
- The potential for serious impact on wildlife, fish or natural habitats resulting in significant fines and reputational damage.

Management and mitigation

We have developed a strong health and safety culture where ‘nothing we do at United Utilities is worth getting hurt for’ is supported by strong governance and management systems certified to OHSAS 18001. We actively seek to improve health, safety and wellbeing across the group through targeted improvements and benchmarking against our peers. Also certified to ISO 14001, we seek to protect and improve the environment through the responsible delivery of our services. This includes helping to support rare species and habitats through targeted engagement and activity and commitment to reducing our carbon footprint by designing out waste from our operations, generating our own energy and looking at ways to reduce our use of raw materials. We recognise the impact the environment can have on our service provision with extreme weather and climate change being integrated into our risk, planning and decision-making processes.

Current key risks, issues and uncertainties

- COVID-19;
- Impounding reservoirs containing significant volumes of water;
- Other critical asset failure;
- Multiple hazards including process safety, use or accidental release of chemicals, excavation, tunnelling and construction work; and
- Fluvial and coastal flooding associated with climate change.

Our risk management

The group's top ten event-based risks

As described previously, the board regularly considers the group's most significant risks in our business risk profile and which underpin the principal risks set out on the previous pages. The following are summaries of the ten highest business risk exposures in an operational context (likelihood and impact) from across the group.

(1) Failure of significant water supply systems with the current lowest resilience due to asset deterioration, leading to water quality issues and/or supply interruptions to a large proportion of the United Utilities customer base. Potential impacts include penalties, additional cost, customer compensation and reputational damage. Mitigation includes capital projects for asset replacement as well as extensive programmes of asset monitoring, surveys and maintenance. **Risk stable.**

(2) Partial failure of the wastewater network owing to hydraulic capacity, operational capacity or equipment failure relative to changing and extreme weather conditions. Impacts include sewer flooding and consequent penalties, additional cost, customer compensation and reputational damage. Mitigation includes the combination of the Drainage and Wastewater Management Plans (DWMPs) and embedment of the Wastewater Network Operating Model. These include preventative maintenance, inspection regimes, asset condition surveys, sewer rehabilitation projects, customer campaigns and sewer cleaning programmes. **Risk stable.**

(3) Data and technology assets could be significantly compromised due to malicious or accidental activity, leading to a major impact to key business processes and operations. Potential consequences include penalties, additional costs, customer compensation and reputational damage, as well as impacts to business services, regulatory compliance, financial and operational performance. Mitigation includes multiple layers of control with an approach that covers people, process and technology. This includes a secure perimeter with segmented internal network zones and a core data network supported by infrastructure and system access controls, with constant monitoring and 24/7 incident and forensic response capability. **Risk stable.**

(4) Failure to adequately treat wastewater due to operational capacity and capability of wastewater treatment works, leading to environmental permit breaches, with potential impacts including penalties, additional cost, customer compensation and reputational damage. Mitigation includes an improved effective operations and maintenance programme and operating procedures including proactive maintenance, operative training and compliance audits. **Risk stable.**

(5) The unintended introduction of sewage and other pollutants into the environment due the capacity and/or capability of wastewater treatment or network assets, leading to extensive environmental impact and pollution with potential ODI penalties, prosecution fines, additional opex, capex and reputational damage. Mitigation includes our proactive strategy of identifying defects and collapses through the use of extensive field CCTV surveys, staff training and incident analysis. In addition we are developing a Pollution Incident Reduction Plan and are improving our capabilities further through the development of Integrated Drainage Area Studies and Wastewater Network Management. **Risk stable.**

(6) Competition in the bioresources market following the reforms set out in the Water Act 2014, Water2020 and PR19 process, leading to a loss of business and reduced operational efficiency. Mitigation includes delivering operational efficiency, continued engagement with Ofwat and a strategic review of the bioresources business. **Risk stable.**

(7) Failure to achieve AMP7 financing outperformance because of falling CPIH inflation impacting the effective real rate on embedded fixed rate nominal debt, resulting in a lower level of financing outperformance than expected. Mitigation includes board approval of our interest rates and inflation management strategies, ongoing monitoring of markets and regulatory developments against financial outperformance projections. **Risk stable.**

(8) Delay to the Haweswater Aqueduct Resilience Programme, triggered by exit from the Direct Procurement for Customers process. Causes could include the market's failure to present a better value proposition than in-house delivery, lack of market appetite/capability to deliver the scheme, or unacceptable business impacts caused by financing. Impacts include increased risks of failure due to project delays, additional/unrecoverable cost and the requirement for significant finance to be raised for in-house procurement. Mitigation includes adoption of HM Treasury's Green Book process, regular liaison with Ofwat, market engagement and financial modelling. We are progressing direct United Utilities activity including ecological surveys and ground investigations, which are both key activities to progressing the planning applications, and developing the commercial aspects of the DPC**. Risk increasing.**

(9) Partial failure of the water distribution system caused by network characteristics, asset condition, operational strategies, extreme weather or third party damage leading to the loss of treated water and failure of the leakage target. Impacts include incurring ODI penalties, extra opex to recover the leakage target and reputational damage. Mitigation includes leakage detection engineers, sounding valves and fittings within the network, monitoring and managing pressure and flow, and analysing and interrogating system data to assess and allocate leak detection and repairs to the right area. **Risk decreasing.**

(10) Failure to treat sludge due to a combination of treatment capacity and quality of sludge produced at wastewater treatment works, leading to higher operating costs, loss of revenue from renewable energy and the potential for sludge to be inadequately disposed of. Mitigation is by a bioresource production planning process which incorporates regular testing and analysis, a digester and tank cleaning programme and a focused maintenance programme. **Risk stable.**

New and emerging risks and issues

We continue to review and monitor external and internal risk factors to understand and assess new and emerging risks, as well as the evolution of existing risks. This enables us to plan our strategy and operations to minimise threats of this nature. Notable new and emerging risks and some possible impacts are set out below.

- **No suitable trade deal with the EU:** Additional cost of products sourced directly or indirectly from the EU. The most critical product category is chemicals for the treatment of water and sludge production.
- **COVID-19:** In the short term, there is a risk of reduced recovery of household debtors, non-household charges to retailers and the additional impact flowing from the risk of reduced recovery of business customer receivables within Water Plus. In addition, reduction in resource because of illness or self-isolation and the impacts of social distancing have potential impacts on service delivery, capital project delivery, ODIs and C-MeX. In the longer term, economic impacts resulting from COVID-19 could include sustained levels of high unemployment and corporate failures affecting debt collection and lower inflation affecting revenues, financing costs and RCV.
- **Customer Measure of Experience (C-MeX):** A new regulatory customer service measure is being introduced for the new AMP which introduces a much broader set of customer factors and measures than the previous service element, opening up a new group of customers and experiences which could affect our performance ratings.
- **Plastics:** Implications associated with the current attention on single use plastics and microplastic pollution in water, wastewater effluent discharge and sludge disposal (see biosolids recycling).

- **Biosolids recycling to agriculture:** The practice of disposing of biosolids to agriculture could be banned (partially or in full) in the UK based on similar actions within Europe.
- **Water scarcity and water trading:** Water scarcity is an emerging issue within the UK, which has knock on implications to UU in relation to the proposed strategic transfer of water from the North West to the South East of England and the associated service, commercial and reputational impacts.

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. Beyond that reported in previous years on the Argentina multiparty 'class action' and the Manchester Ship Canal Company matters (to which there have been no material developments), there is nothing specific to report on material litigation.

Promoting the success of the company for the benefit of all

S172(1) Statement

Throughout this annual report, we provide examples of how we: take into account the likely consequences of long-term decisions; build relationships with stakeholders; 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; and attribute importance to behaving as a responsible business. The board appreciates the importance of effective stakeholder engagement and that stakeholders' views should be considered in its decision-making. More details on stakeholder engagement can be found on pages 6 to 9.

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 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 2020 including:

Acceptance of the final determination

A key decision taken during the year was the acceptance by the UUW Board of Ofwat's final determination (FD) of the 2020–2025 business plan. Whilst some concessions were made in our decision to accept the FD, the directors believe that in doing so:

- There will be a long-term beneficial impact on the group and all of its stakeholders, giving the company the certainty needed to deliver a better quality, more reliable water and wastewater service for customers in the North West of England to 2025 and beyond. We will continue to operate our business within tight budgetary controls and in line with regulatory targets providing particular benefits to customers in relation to affordability, and recognising those more vulnerable customers. In accepting the FD, we recognised the extensive engagement undertaken with customers, enabling us to gain an understanding of their views and priorities, communicating and listening through new channels and underpinned by working with the independent customer challenge group YourVoice. We are working to enhance our operational resilience through both investment and innovation;
- Closely related to the acceptance of the FD was the board's approach to setting UUG's dividend policy for the same period. As the board of directors, our intention is to behave responsibly toward our shareholders and treat them fairly and equally, so they too may benefit from the successful delivery of our plan. As part of the UUG's dividend policy, we have committed to continue to share the gains of outperformance with customers and shareholders.

COVID-19

The business implications of the COVID-19 pandemic have been fast moving and uncertain but the directors consider that the decisions made will be in the best long-term interests all the company's stakeholders:

- We have committed to helping those customers who have been affected by COVID-19 and are having difficulty paying their bills at this time. We are giving those customers the option to request a three-month payment holiday and we have widened the eligibility for our 'Back on Track' social tariff for an initial interim period to 2020/21 and 2021/22. To support local communities, £3.5 million has been donated to our Trust Fund to make sure that financial support is available to as many customers as possible who are struggling to pay their bills due to a change in their income. Money is also given to debt advice charities;
- We aim to act responsibly and fairly with our stakeholders and engage with them to gain an understanding of their needs. We have been engaging with our supply chain to get a better understanding of the financial difficulties that many are experiencing, and have committed to temporarily altering payment terms with suppliers in the short term, paying them within seven days where possible to assist with their cash flow. In some cases, we have agreed to a number of temporary concessions to contractual terms to address changes to working practices, to ensure suppliers can recover additional costs they have incurred where appropriate;
- We took the decision that we would not use the government's furlough scheme and that we would continue to support all our workforce throughout the situation, as we believe this is the responsible approach of an organisation like ours. We have established a Staff Outreach Scheme under which employees facing financial hardship because of COVID-19 (perhaps due to a family member losing their job or having their earnings reduced) can apply for financial assistance from the company;
- Recognising the difficulty being experienced by many customers in our region, all members of the board volunteered a 20 per cent reduction to their salary/fees for three months, with the money instead being shared with organisations supporting those in the front line helping communities cope with COVID-19;
- We believe these actions are in line with our culture and the high standards of business conduct and good governance we set ourselves

Employees

- We continue to be a responsible employer in our approach to employees, ensuring we communicate and engage with them regularly in a variety of ways and that the voice of the workforce is heard and taken into account when making decisions. We recognise our employees are fundamental to the long-term success of our business. Their health, safety and wellbeing is one of our primary considerations in the way we operate and the support we provide to them;
- We provide rates of pay that exceed the voluntary Living Wage that applies to our region, along with a range of benefits including company-funded healthcare for employees at all levels;
- More than 99 per cent of our current employees are members of one of our two pension schemes, along with around 14,000 former employees. We have £4 billion of pension assets under management. The board approved the decision to accelerate the payment of the remaining deficit repair contributions (totalling around £126 million) in 2019, meaning that the pension scheme has minimal reliance on the company in order to meet all of its liabilities. As a result, customers and shareholders are protected from significant exposures to future potential pension scheme deficits (see page 66);
- Employees throughout the business participate in the annual bonus scheme, ensuring a shared focus on the performance of the business plan. The directors' remuneration policy provides that: the executive directors will normally receive a salary increase broadly in line with the increase awarded to the general workforce; the performance measures for the annual bonus align with the company's key strategic goals for the year, reflecting predominately financial and operational objectives; and for the long-term plan, the measures are 50 per cent on the Return on Regulated Equity (RoRE) and 50 per cent on a basket of customer measures.

Carbon commitment

- By its very nature, the long-term success of our business is reliant on long-term planning, particularly in relation to the environment and climate change. In line with the UK's commitment in the 2008 Climate Change Act, we have committed to achieving science-based targets to reduce our emissions. As part of our climate change mitigation strategy we have made a series of pledges to deliver these targets and to setting further targets across our full value chain, including transitioning to using 100 per cent renewable energy by 2021 and a 100 per cent green fleet by 2028 (see page 51).

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 business principles set out how we behave as a business and are applicable to the areas of disclosure required by s414CB(1). The stakeholder metrics table (see page 40) also includes data in relation to the areas of disclosure required by s414CB(1).

The UU PLC Board supports the UUG Board and therefore the below non-financial information statement should be read in conjunction with the UUG Annual report and financial statements.

Reporting requirement	Information necessary to understand our business and its impact, policy, due diligence 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:	• Waste and resource use policy
	• Natural resources – see page 14	• Environmental policy
	• Natural environment – see page 17	• Water Resources Management Plan - see pages 20 and 21
	• Reducing our carbon footprint – see pages 44 to 56	• Emissions target – see pages 44 to 56
Employees	Reflecting the needs of our employees:	• Health and safety policy
	• Competitive base salaries and benefits – see UUG Annual report page 171	• Equality, diversity and inclusion policy
	• Health and safety – see page 41	• Flexible working arrangements
	• Mental wellbeing – see page 27	• Agency worker policy
	• Gender pay report 2019 – see UUG Annual report pages 60 and 154	• Mental wellbeing policy
	• Engagement – see pages 6 and 7	• Human rights policy – see page 33
	• Board diversity - see UUG Annual report page 129	• Board diversity policy - see UUG Annual report page 129
Respect for human rights	Reflecting the needs of our stakeholders:	• Employee data protection policy
	• Suppliers – see page 8	• Slavery and human trafficking statement
	• Diversity within our workforce – see pages 34 and 35	• Human rights policy – see page 33
Social matters	Reflecting the needs of our stakeholders:	• YourVoice – see page 6
	• Customers – see page 7	• Charitable matched funding guidance
	• Community – see page 6	• Volunteering policy
	• Environment – see page 8 and 44	• Sustainable supply chain charter – see page 33
	• Suppliers – see page 8	• Commercial procurement policy
	• Regulators – see page 9	
Anti-corruption and anti-bribery	Reflecting the needs of employees and suppliers:	• Anti-bribery policy
	• Employees – see page 27	• Fraud investigation and reporting processes
	• Suppliers – see pages 28 and 29	• Whistleblowing policy
		• Internal financial control processes
		• Commercial procurement policy

The Strategic report was approved by the board on 30 June 2020 and signed on its behalf by:

JR Houlden
Chief Financial Officer

Glossary

AMP: Asset Management Plan period – the five-year regulatory price control periods since privatisation. AMP6 was the sixth AMP since privatisation and ran from 1 April 2015 to 31 March 2020. AMP7 is the seventh AMP since privatisation and will run from 1 April 2020 to 31 March 2025.

C-MeX: Customer measure of experience. This measure of customer satisfaction for AMP7 replaces SIM as a measure of the service customers receive from their water company.

CDP: Formerly the Carbon Disclosure Project, CDP through its environmental disclosure system supports companies to measure and manage their risks and opportunities on climate change, water security and deforestation.

CPI/CPIH: Consumer Price Index/Consumer Price Index including Housing. CPIH is the UK government's preferred measure of inflation, and will be used by Ofwat as its primary inflation index in AMP7. CPI is the closest proxy for CPIH for which debt and derivatives are available in the financial markets.

CCW: Consumer Council for Water, an independent body that represents customers' interests relating to price, service and value for money as well as conducting independent research and investigating customers' complaints relating to water quality.

D-MeX: Developer measure of experience – new measure of developer satisfaction for AMP7.

Defra: Department for Environment, Food & Rural Affairs, a UK government department responsible for setting policies and regulations on environmental, food and rural issues. Defra sets the overall water and sewerage policy framework in England, including setting standards and drafting legislation.

DWI: Drinking Water Inspectorate. The DWI regulates the quality of the drinking water that we supply and ensures its safety and compliance with Water Quality Regulations.

EA: Environment Agency. The EA is the principal adviser to the UK Government and main body set up to protect and improve the environment in England and Wales. They work in collaboration with other organisations to reduce flood risk, promote sustainable development, and secure environmental and social benefits.

ESG: Environmental, social and governance – describes areas that characterise a sustainable, responsible or ethical investment in a business or company.

Fast-track category: Our business plan was graded in Ofwat's Initial Assessment of Plans, leading to a faster timeline during the price review and rewarded with an additional 0.11 per cent allowed return above the base allowance for non-fast track companies.

FD: Final determination – the regulatory settlement Ofwat gives each company to deliver for each five-year regulatory price control period.

K factor: Percentage annual increase or decrease in allowed regulatory revenue before inflation.

KPIs: Key performance indicators. We measure our performance against a range of operational and financial KPIs plus a variety of other metrics.

ODIs: Outcome delivery incentives – the outperformance payments and penalties associated with operational performance against agreed regulatory targets.

Ofwat: Independent economic regulator for the water and wastewater sector in England and Wales, responsible for protecting customers' interests while ensuring water companies finance and conduct their functions effectively.

PR19: The Price Review process for AMP7, concluded in December 2019.

Price Review: The process through which each water and wastewater company submits a business plan for the next five-year period, and Ofwat sets the price and service package it must deliver.

Priority Services: A scheme aimed at customers who may need additional support with their water and wastewater services due to age, disability, illness, or other vulnerable circumstances.

RPI: Retail Price Index – until recently (see CPIH) this was the UK Government's preferred measure of inflation, and prior to AMP7 RPI was used by Ofwat as its primary inflation index to calculate inflation of revenue and RCV.

SIM: Service Incentive Mechanism, Ofwat’s measure of the service customers experience from their water company, which will be replaced by C-MeX in AMP7.

STEM: Science, Technology, Engineering and Mathematics – technical fields in which we need to avoid a shortage of skills in the long term.

Systems Thinking: Our industry-leading approach to the way we operate our network and assets, which is one of our competitive advantages and a key value driver.

TCFD: Task Force on Climate-related Financial Disclosures – set up to develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.

Totex: Total expenditure – this comprises operating costs (opex), infrastructure renewals expenditure (IRE) and capital expenditure (capex).

UUG: United Utilities Group PLC, the listed group company.

UUW: United Utilities Water Limited, the regulated entity.

YourVoice: The independent customer challenge group whose aim is to ensure customers are at the heart of our business planning.

The directors present their report and the audited financial statements of United Utilities PLC and its subsidiaries for the year ended 31 March 2020.

Profit and dividends

The results for the year, set out in the consolidated income statement on page 101 show that profit for the year after tax was £133.6 million (2019: £388.1 million).

The directors have not recommended a final ordinary dividend (2019: £nil). Interim ordinary dividends of £284.5 million (2019: £274.5 million) have been declared and paid during the year.

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.

Political donations

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 includes promoting United Utilities' activities at the main political parties' annual conferences, and occasional stakeholder engagement in Westminster.

The group incurred expenditure of £23,627 (2019: £9,338; 2018: £21,662) as part of this process, the increase on the previous year as a result of a parliamentary reception hosted by the company to engage parliamentary stakeholders on its business plan development. At the 2019 UUG AGM, an authority was taken to cover such expenditure. A similar resolution will be put forward at the 2020 UUG AGM to authorise the company and its subsidiaries to make such expenditure.

Research and development

The group undertakes research primarily to provide improved standards of service to customers, together with continuing improvements in business efficiency. Its intention is to strengthen its understanding of science and technology in relation to its range of wastewater and water treatment processes to ensure that treatment plants are able to meet the required current and future standards of environmental performance whilst being operated in a cost-effective and efficient manner.

The group is a member of a number of collaborative research programmes including UK Water Industry Research and Water Research Centre, both of which address common issues that face the UK water industry. The group also undertakes specific projects with these and other research and development providers, manufacturers and with universities. Research and development expenditure incurred by the group and charged to the income statement was £1.0 million in the year ended 31 March 2020 (2019: £1.0 million).

Carbon footprint

The group is committed to reducing its carbon footprint and increasing its generation of renewable energy. In 2018/19, the group's carbon footprint totalled 167,856 tonnes of carbon dioxide equivalent, which is a 71 per cent reduction since 2005/06.

For further information please visit unitedutilities.com/corporate/responsibility/environment/climate-change/.

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 107.

Directors

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

PA Aspin
SR Fraser (resigned 31 August 2019)
JR Houlden
SL Mogford

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 also maintains an appropriate level of directors' and officers' liability insurance.

Employees

Our policies on maternity, paternity, adoption, personal and special leave go beyond the minimum required by law. For disabled applicants and existing employees, we are committed to fulfilling our obligations in accordance with the relevant legislation. Applicants with disabilities are given equal consideration in the application process. Disabled colleagues have equipment and working practices modified for them as far as is possible and wherever it is safe and practical to do so. A copy of our business principles can be found at unitedutilities.com/corporate/about-us/governance/business-principles, which explains the way in which we do business and make it clear that our employees must seek to act with integrity and fairness and observe legal requirements. Anyone with serious concerns that the company may not be adhering to these principles is encouraged to speak up via their line manager or through a confidential telephone line. Importance is placed on strengthening employees' engagement, measuring their views annually, and taking action to improve how they feel about the company and understand its direction. Employees are provided with regular information, through briefings and access to other online materials, to enable them to understand the financial and economic factors affecting the company's performance.

Amongst other initiatives, an Employee Voice Panel has been established; meetings will be held quarterly with the venue rotating around our region. The Panel will consist of circa 30 employees elected from across all employee segment groups and geographical areas. Panel members will be re-elected approximately every two years. The objectives of the Panel are to: provide the opportunity for a two-way channel of communication between the board and the workforce; provide insight to the board on how people think and feel about working for the company; and contribute to the monitoring and assessment of the culture of the business. 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 82.

Employees are encouraged to hold shares in UUG through the operation of an all employee share incentive plan. Information on the average number of employees can be found in note 3 on page 115.

Environmental, social and community matters

Details of our approach, as a responsible business, is set out in our business principles, which can be found on our website at unitedutilities.com/corporate/about-us/governance/business-principles/. Our approach to engagement with our environmental stakeholders and those in the communities we serve can be found on pages 7 to 8. 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 82.

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 6 to 9. 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 82.

Our sustainable supply chain charter sets out how we work with our suppliers, which can be found on our website at: unitedutilities.com/corporate/about-us/governance/suppliers/how-we-buy/sustainable-supply-chain/.

We are also 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 2020, our average time taken to pay invoices was 15 days; in the previous six months it was 14 days.

Energy and Carbon

Our TCFD reporting includes our energy and carbon report on pages 44 to 56 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 A5 to the financial statements.

Share capital

At 31 March 2020, the issued share capital of the company was £881,787,478 divided into 881,787,478 ordinary shares of £1 each. Details of our share capital and movements in our issued share capital are shown in note 22 to the financial statements on page 137.

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 73 to 80. 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 he is aware, there is no relevant audit information of which the company's auditor is unaware; and

2. he has taken all the steps that he ought to have taken as a director in order to make himself 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 144 to 145 of the UUG 2020 Annual report and financial statements).

The UU board has decided to recommend KPMG LLP to be reappointed as external auditor to the company at the forthcoming UU 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:

JR Houlden

Chief Financial Officer

30 June 2020

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, Strategic Report, the Directors' 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 have elected to prepare the Group and parent Company financial statements in accordance with International Financial Reporting Standards as adopted by the EU (IFRSs as adopted by the EU) and applicable law.

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 IFRSs as adopted by the EU;
- 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.

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.

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 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:

JR Houlden
Chief Financial Officer
30 June 2020

Independent auditor’s report

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 2020 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 107 to 113 and 169 to 178.

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 2020 and of the Group’s profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU);
- the parent Company financial statements have been properly prepared in accordance with IFRSs as adopted by the EU 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 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

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 audit committee.

We were first appointed as auditor by the directors on 22 July 2011. The period of total uninterrupted engagement is for the eight financial years ended 31 March 2020. 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 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 judgment, 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 (unchanged from 2019 with the exception of going concern which is a new key audit matter), 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.

Independent auditor’s report

to the members of United Utilities PLC

<table>
<tr><td colspan="2">Revenue recognition and allowance for household customer debt
Revenue not recognised: £19.4 million (2019: £18.0 million)
Provision for household customer debts: £49.4 million (2019: £52.9 million)
Refer to pages 109 to 111 and 170 (accounting policy), and page 127 to 128 (financial disclosures).</td></tr>
<tr><td>The Risk

Subjective estimation:

At each balance sheet date:

- judgment 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 the recoverability of trade receivables has a high degree of estimation uncertainty in particular because of the potential effects of the COVID-19 pandemic, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (see pages 109 to 111 accounting policies) disclose the sensitivity estimated by the Group.</td>
<td>Our Response

Our procedures included:
Accounting analysis – Assessing the derecognition of revenue for compliance with relevant accounting standards where the collection of consideration is not probable on the date of initial recognition;

Control observation – testing the group's controls over revenue recognition and provision for household customer debts, including reconciliations between sales and cash receipts systems and the general ledger;

Methodology choice – assessing 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; and

Assessing transparency – assessing 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 revenue recognised to be acceptable (2019: acceptable); and

- We considered the level of doubtful debt provisioning to be acceptable (2019: acceptable).</td></tr>
<tr><td colspan="2">Capitalisation of costs relating to the capital programme
£759.5 million (2019: £726.2 million)
Refer to page 111 and 171 to 175 (accounting policy), and page 123 (financial disclosures).</td></tr>
</table>

Independent auditor's report

to the members of United Utilities PLC

The Risk	**Our Response**
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 project costs as capital or operating expenditure is inherently judgemental. Costs capitalised include an allocation of overhead costs, relating to the proportion of time spent by support function staff, which is based on assumptions involving a high degree of judgement. The effect of these matters is that, as part of our risk assessment, 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 (Accounting policies section, page 111) disclose the sensitivities estimated by the Group.	**Our procedures included:** ***Accounting analysis*** – Assessing the group's capitalisation policy for compliance with relevant accounting standards; ***Control observation*** – Testing controls over the application of the policy in the period including review of project business case submissions, and attending a sample of capital approval meetings to observe the judgements made and evaluating the documented conclusions; ***Tests of details*** **–** Critically assessing the costs capitalised for a sample of projects against the capitalisation policy and then for a sample of cost transactions within the sampled projects ensure that the costs capitalised agree to respective project purchase order authorisation and purchase invoice; ***Tests of details*** **–** Identify and assess the impact of existing projects where the capitalisation rate has changed during the year; ***Historical comparisons*** **–** Critically assess the proportion of capitalised overhead costs using historical comparisons and expected changes based upon enquiry and our sector knowledge; and challenged the estimates made by management for a sample of specific cost centre; and ***Assessing transparency*** **–** Assessing the adequacy of the group's disclosures of its capitalisation policy including the judgement involved in assessing expenditure as capital and the judgement relating to the allocation of overhead costs. **Our results:** We found the group's classification of expenditure as capital or operating to be acceptable (2019: acceptable).

Independent auditor's report

to the members of United Utilities PLC

Retirement benefit obligation valuation £3,057.6 million (2019: £3,425.2 million) *Refer to pages 111 to 112 and 176 (accounting policy), and pages 132 to 133 and 158 to 166 (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 (note A5) disclose the sensitivity estimated by the Group.	**Our Response** **Our procedures included:** ***Our actuarial expertise*** – We 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*** – We 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*** – We assess the competence and independence of the external actuary engaged by the Group; and ***Assessing transparency*** – We 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 note A5 to the financial statements. **Our results:** We found the resulting estimate of the retirement benefit obligations to be acceptable (2019: acceptable).
Carrying value of interest in Water Plus joint venture £nil million interest in joint venture (2019: £36.7 million) *Refer to pages 112 to 113, and 169 (accounting policy), and pages 125 to 126 (financial disclosures).*	
The Risk **Forecast-based valuation:** The carrying value of the group's interest in the Water Plus joint venture is dependent on estimates of the recoverable amount of intangible assets within Water Plus which are more subjective because of the potential effects of Covid-19.	**Our Response** **Our procedures included:** ***Assessing methodology*** – we challenged the Group's assessment of whether the separate loans made to Water Plus formed part of the Group's interest in the joint venture and considered whether this was in accordance with the relevant accounting standards;

Independent auditor's report

to the members of United Utilities PLC

<table>
<tr><td></td><td>we assessed the principles and integrity of the cash flow model used to estimate the recoverable amount of intangibles in Water Plus;

Our valuation expertise – we challenged the assumptions used by the Group in the calculation of the discount rates, including comparisons with external data sources and by involving our own valuation specialist to assist us in assessing the discount rate assumptions applied;

Sensitivity analysis – we performed our own sensitivity analysis including a reasonably possible changes in forecast cash flows and an alternative discount rate assumption to assess level of sensitivity to these changes; and

Assessing transparency – we assessed whether the Group's disclosures about both the accounting judgement of what comprises the Group's interest in Water Plus and the sensitivity of the outcome of the impairment assessment to a reasonably possible change in the discount rate and cash flows reflected the risks inherent in the valuation.

Our results:
We found the resulting estimate of the recoverable amount of the intangible assets within Water Plus to be acceptable (2019: acceptable).</td></tr>
<tr><td colspan="2">Going Concern
Refer to pages 107 (accounting policies)</td></tr>
<tr><td>The Risk
The financial statements explain how the Board has formed a judgement that it is appropriate to adopt the going concern basis of preparation for the group and parent company.

That judgement is based on an evaluation of the inherent risks to the Group's and Company's business model and how those risks might affect the Group's and Company's financial resources or ability to continue operations over a period of at least a year from the date of approval of the financial statements.

The evaluation of going concern is based on forecast cash flows which have a greater level of estimation risk because of the impact of Covid-19.</td><td>Our Response
Our procedures included:
Funding assessment – we have considered the availability of existing debt arrangements and committed loan facilities, including a review of compliance with covenants and expected maturity dates;
Historical comparison – we have compared the budgets to actual results for several periods to confirm the accuracy of management's forecasts
Benchmarking assumptions – we compared the key assumptions in the forecast including lower expected household collections, lower non-household consumption and delayed collection of household charges and increased contractor costs to third part evidence such as independent sector forecasts;
Sensitivity analysis – we considered sensitivities over the level of available financial resources indicated by the Group's financial forecasts taking account of reasonably possible (but not</td></tr>
</table>

Independent auditor’s report

to the members of United Utilities PLC

	unrealistic) adverse effects that could arise from these risks individually and collectively including the potential effects of the COVID-19 pandemic; ***Evaluating directors intent –*** we evaluated 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; and ***Assessing transparency –*** we assessed the completeness and accuracy of the matters covered in the going concern disclosure through the procedures performed above along with our assessment of the Viability Statement. **Our results:** We found the going concern disclosure without any material uncertainty to be acceptable.
Recoverability of the parent company’s investment in United Utilities North West Limited Investment in United Utilities North West Limited £4,225.1 million (2019: £3,907.1 million) *Refer to page 169 (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 99% (2019: 53.2%) 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** **Our procedures included:** ***Tests of detail*** – We 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 North West Limited to be acceptable (2019: acceptable).

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 £22 million (2019: £18.51 million), determined with reference to a benchmark of group profit before tax of £336.2 million, normalised to exclude net fair value gains or losses on debt and derivative instruments of £76.3 million as disclosed in note 6; the accelerated depreciation on Shell Green in note 4 of £82.3m; and impairments within the Water Plus joint venture in note 11 of £39.1m, of which it represents 4.1% (2019: 4.7%). The group team performed procedures on the items excluded from normalised group profit before tax.

Materiality for the parent company financial statements as a whole was set at £12 million (2019: £18.5 million), determined with reference to a benchmark of company net assets, of which it represents 0.3 per cent (2019: 0.3 per cent).

Independent auditor’s report

to the members of United Utilities PLC

We agreed to report to the audit committee any corrected or uncorrected identified misstatements exceeding £0.5 million (2019: £0.5 million), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the group’s 33 (2019: 33) reporting components, we subjected five (2019: six) to full scope audits for group purposes and one (2019: none) to specified risk-focused audit procedures. The latter was not individually financially significant enough to require a full scope audit for group purposes, but did present specific individual risks that needed to be addressed.

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 £2.5 million to £20 million (2019: £2.5 million to £19.5 million), having regard to the mix of size and risk profile of the group across the components.

The group team visited none (2019: none) of the component locations to assess the audit risk and strategy. During the course of the audit we visited each of the six (2019: we visited five of six) components and held meetings. At these meetings, the findings reported to the group team were discussed in more detail, and any further work required by the group team was then performed by the component auditor.

The work on one of the six reporting components (2019: one of seven) was performed by component auditors and the rest, including the audit of the parent company, was performed by the group team. The group team instructed the component auditor as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back.

4. We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Company or the Group or to cease their operations, and as they have concluded that the Company’s and the Group’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”).

Our responsibility is to conclude on the appropriateness of the Directors’ conclusions and, had there been a material uncertainty related to going concern, to make reference to that in this audit report. 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 absence of reference to a material uncertainty in this auditor's report is not a guarantee that the group or the company will continue in operation.

We identified going concern as a key audit matter (see section 2 of this report). Based on the work described in our response to that key audit matter, we are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least a year from the date of approval of the financial statements.

We have nothing to report in these respects.

5. 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

Independent auditor's report

to the members of United Utilities PLC

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.

6. 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.

7. 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 other irregularities (see below), 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, other irregularities 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.

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

Irregularities – ability to detect

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 and through discussion with the directors and other management (as required by auditing standards), and 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. We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the

Independent auditor's report

to the members of United Utilities PLC

audit. This included communication from the group to component audit teams of relevant laws and regulations identified at group level.

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; 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 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 other management and inspection of regulatory and legal correspondence, if any. Through these procedures, we became aware of actual or suspected non-compliance and considered the effect as part of our procedures on the related financial statement items. The identified actual or suspected non-compliance was not sufficiently significant to our audit to result in our response being identified as a key audit matter.

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 (irregularities) 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 irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. We are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

8. 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.

William Meredith, for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
St Peter's Square, Manchester M2 3AE
30 June 2020

Consolidated income statement

for the years ended 31 March

	Note	2020 £m	2019 £m
Revenue	2	1,859.3	1,818.5
Employee benefits expense	3	(161.4)	(169.6)
Other operating costs	4	(403.4)	(422.8)
Allowance for expected credit losses – trade and other receivables	4	(41.8)	(26.5)
Other income	4	3.4	3.6
Depreciation and amortisation expense	4	(482.8)	(393.2)
Infrastructure renewals expenditure		(143.0)	(175.1)
Total operating expenses		(1,229.0)	(1,183.6)
Operating profit		630.3	634.9
Investment income	5	56.9	47.6
Finance expense	6	(307.9)	(222.5)
Allowance for expected credit losses – loans to joint ventures		(5.0)	-
Investment income and finance expense		(256.0)	(174.9)
Share of profits of joint ventures	11	(38.1)	6.7
Profit before tax		336.2	466.7
Current tax charge	7	(45.1)	(44.6)
Deferred tax charge	7	(157.5)	(34.0)
Tax	7	(202.6)	(78.6)
Profit after tax		133.6	388.1

All of the results shown above relate to continuing operations.

Consolidated statement of comprehensive income

for the years ended 31 March

	Note	2020 £m	2019 £m
Profit after tax		133.6	388.1
Other comprehensive income			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedge effectiveness		(2.0)	0.4
Tax on items taken directly to equity	7	0.4	(0.1)
Foreign exchange adjustment		1.3	(0.8)
Other comprehensive income that may be reclassified to profit or loss		(0.3)	(0.5)
Items that will not be reclassified to profit or loss in subsequent periods:			
Remeasurement gains on defined benefit pension schemes	18	154.6	73.0
Change in credit assumptions for debt reported at fair value through profit or loss		34.2	6.6
Cost of hedging – cross-currency basis spread adjustment		1.3	(2.2)
Deferred tax adjustments in respect of prior years on net fair value gains		(2.4)	-
Tax on items taken directly to equity	7	(157.1)	(13.1)
Other comprehensive income that will not be reclassified to profit or loss		30.6	64.3
Total comprehensive income		163.9	451.9

Consolidated and company statements of financial position

at 31 March

	Note	Group 2020 £m	Group 2019 £m	Company 2020 £m	Company 2019 £m
ASSETS					
Non-current assets					
Property, plant and equipment	9	11,510.9	11,153.4	3.0	-
Intangible assets	10	189.0	202.7	-	-
Interests in joint ventures	11	46.8	79.0	-	39.1
Other investments	12	0.1	11.5	4,014.9	4,008.3
Trade and other receivables	14	1,849.1	1,866.5	1,761.5	1,760.6
Retirement benefit surplus	18	754.1	483.9	175.0	110.1
Derivative financial instruments	A4	617.8	387.8	-	-
		14,967.8	14,184.8	5,954.4	5,918.1
Current assets					
Inventories	13	16.6	14.9	-	-
Trade and other receivables	14	257.9	261.9	1,691.1	1,413.8
Current tax asset		37.7	16.4	-	-
Cash and short-term deposits	15	528.1	339.3	25.0	12.1
Derivative financial instruments	A4	0.1	101.3	-	0.7
		840.4	733.8	1,716.1	1,426.6
Total assets		15,808.2	14,918.6	7,670.5	7,344.7
LIABILITIES					
Non-current liabilities					
Trade and other payables	20	(761.2)	(697.4)	(4.4)	-
Borrowings	16	(7,518.1)	(7,115.6)	(322.4)	(305.2)
Deferred tax liabilities	19	(1,462.6)	(1,146.0)	(60.1)	(17.1)
Derivative financial instruments	A4	(135.4)	(66.1)	-	-
		(9,877.3)	(9,025.1)	(386.9)	(322.3)
Current liabilities					
Trade and other payables	20	(339.8)	(326.9)	(43.2)	(57.7)
Borrowings	16	(924.2)	(773.8)	(755.8)	(714.6)
Provisions	20	(16.4)	(16.8)	-	-
Derivative financial instruments	A4	(8.9)	(13.8)	(0.5)	(0.2)
		(1,289.3)	(1,131.3)	(799.5)	(772.5)
Total liabilities		(11,166.6)	(10,156.4)	(1,186.4)	(1,094.8)
Total net assets		4,641.6	4,762.2	6,484.1	6,249.9
EQUITY					
Capital and reserves attributable to equity holders of the company					
Share capital	22	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		7.0	8.6	-	-
Retained earnings		2,322.8	2,441.8	4,172.3	3,938.1
Shareholders' equity		4,641.6	4,762.2	6,484.1	6,249.9

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 30 June 2020, and signed on its behalf by:

JR Houlden
Chief Financial Officer

Company statement of changes in equity

for the years ended 31 March

	Share capital £m	Share premium account £m	Other reserves* £m	Retained earnings £m	Total £m
Group					
At 1 April 2019	881.8	1,430.0	8.6	2,441.8	4,762.2
Profit after tax	-	-	-	133.6	133.6
Other comprehensive income					
Remeasurement gains on defined benefit pension schemes (see note 18)	-	-	-	154.6	154.6
Change in credit assumption for debt reported at fair value through profit or loss	-	-	-	34.2	34.2
Cash flow hedge effectiveness	-	-	(2.0)	-	(2.0)
Cost of hedging – cross-currency basis spread adjustment	-	-	1.3	-	1.3
Deferred tax adjustments in respect of prior years on net fair value gains	-	-	(2.4)	-	(2.4)
Tax on items taken directly to equity (see note 7)	-	-	0.2	(156.9)	(156.7)
Foreign exchange adjustments	-	-	1.3	-	1.3
Total comprehensive income	-	-	(1.6)	165.5	163.9
Dividends (see note 8)	-	-	-	(284.5)	(284.5)
At 31 March 2020	881.8	1,430.0	7.0	2,322.8	4,641.6

	Share capital £m	Share premium account £m	Other reserves* £m	Retained earnings £m	Total £m
Group					
At 31 March 2018	881.8	1,430.0	(1.8)	2,268.9	4,578.9
Adjustment on initial application of IFRS 9	-	-	12.7	(12.7)	-
Adjustment on initial application of IFRS 15	-	-	-	5.9	5.9
At 1 April 2018	881.8	1,430.0	10.9	2,262.1	4,584.8
Profit after tax	-	-	-	388.1	388.1
Other comprehensive income					
Remeasurement gains on defined benefit pension schemes (see note 18)	-	-	-	73.0	73.0
Change in credit assumption for debt reported at fair value through profit or loss	-	-	-	6.6	6.6
Cash flow hedge effectiveness	-	-	0.4	-	0.4
Cost of hedging – cross-currency basis spread adjustment	-	-	(2.2)	-	(2.2)
Tax on items taken directly to equity (see note 7)	-	-	0.3	(13.5)	(13.2)
Foreign exchange adjustments	-	-	(0.8)	-	(0.8)
Total comprehensive income	-	-	(2.3)	454.2	451.9
Dividends (see note 8)	-	-	-	(274.5)	(274.5)
At 31 March 2019	881.8	1,430.0	8.6	2,441.8	4,762.2

* 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 21.

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 2019	881.8	1,430.0	3,938.1	6,249.9
Profit after tax	-	-	513.3	513.3
Other comprehensive income				
Remeasurement gains on defined benefit pension schemes (see note 18)	-	-	41.2	41.2
Tax on items taken directly to equity (see note 7)	-	-	(35.8)	(35.8)
Total comprehensive income	**-**	**-**	518.7	518.7
Dividends (see note 8)	-	-	(284.5)	(284.5)
At 31 March 2020	881.8	1,430.0	4,172.3	6,484.1

	Share capital £m	Share premium account £m	Retained earnings £m	Total £m
Company				
At 1 April 2018	881.8	1,430.0	3,726.2	6,038.0
Profit after tax	-	-	482.6	482.6
Other comprehensive income				
Remeasurement gains on defined benefit pension schemes (see note 18)	-	-	4.6	4.6
Tax on items taken directly to equity (see note 7)	-	-	(0.8)	(0.8)
Total comprehensive income	**-**	**-**	486.4	486.4
Dividends (see note 8)	-	-	(274.5)	(274.5)
At 31 March 2019	881.8	1,430.0	3,938.1	6,249.9

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 £513.3 million (2019: £482.6 million).

Consolidated and company statements of cash flows

for the years ended 31 March

	Note	Group 2020 £m	Group 2019 £m	Company 2020 £m	Company 2019 £m
Operating activities					
Cash generated from operations	A1	969.3	962.9	299.1	663.7
Interest paid		(149.4)	(143.0)	(28.9)	(26.4)
Interest received and similar income		43.3	35.3	1.8	2.3
Tax paid		(77.3)	(37.9)	(71.5)	(27.5)
Tax received		15.8	-	76.9	-
Net cash generated from operating activities		801.7	817.3	277.4	612.1
Investing activities					
Purchase of property, plant and equipment		(652.8)	(622.3)	-	-
Purchase of intangible assets		(27.2)	(39.9)	-	-
Proceeds from sale of property, plant and equipment		-	2.1	-	-
Grants and contributions received	20	34.7	35.2	-	-
Repayment/(extension) of loans to joint ventures	A6	34.5	(6.0)	-	-
Proceeds from disposal of investments	12	12.0	1.0	-	-
Dividends received from joint ventures	11	4.9	2.2	-	-
Net cash used in investing activities		(593.9)	(627.7)	-	-
Financing activities					
Proceeds from borrowings net of issuance costs		811.5	580.7	20.0	84.6
Repayment of borrowings		(545.9)	(668.6)	-	(419.7)
Dividends paid to equity holders of the company	8	(284.5)	(274.5)	(284.5)	(274.5)
Net cash generated from/(used in) financing activities		(18.9)	(362.4)	(264.5)	(609.6)
Net increase/(decrease) in cash and cash equivalents		188.9	(172.8)	12.9	2.5
Cash and cash equivalents at beginning of the year		325.1	497.9	12.1	9.6
Cash and cash equivalents at end of the year	15	514.0	325.1	25.0	12.1

Accounting policies

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 International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU). 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 bank facilities as well as consideration of the group's capital adequacy, along with a baseline plan which reflects a view of the estimated impact of the COVID-19 pandemic on the group. This baseline plan assumes restrictions and social distancing extend through the summer of 2020 resulting in a one year GDP reduction of 8 per cent which takes 10 quarters to recover, unemployment peaking at 9 per cent, CPIH inflation reducing to zero in the year to March 2021 and then increasing gradually, and non-household business revenues reduced by around 30 per cent in the year to 31 March 2021 before being rebalanced through the revenue cap in subsequent years. This baseline plan has then been subject to a further more extreme downside stress scenario with elevated levels of bad debt persisting in the medium term, increased totex costs, outcome delivery incentive penalties and lower CPIH inflation. Mitigating actions were considered to include access to new debt finance; deferral of capital expenditure; close out of derivative asset balances; access to additional equity and deferral of dividends.

Having considered these matters, the directors do not believe there are any material uncertainties to disclose in relation to the group's ability to continue as a going concern.

Adoption of new and revised standards

The following standards, interpretations and amendments, effective for the year ended 31 March 2020, have had no material impact on the group's financial statements:

- IFRIC 23 'Uncertainty over Income Tax Treatments' (issued on 7 June 2017);
- Amendments to IFRS 9 'Prepayment Features with Negative Compensation' (issued on 12 October 2017);
- Amendments to IAS 28 'Long-term Interests in Associates and Joint Ventures' (issued on 12 October 2017);
- Amendments to IAS 19 'Plan Amendment, Curtailment or Settlement' (issued on 7 February 2017); and
- Annual Improvements to IFRS Standards 2015-2017 Cycle (issued on 12 December 2017)

The following standards, interpretations and amendments, effective for the year ended 31 March 2020, have had a material impact on the group's financial statements – this impact is discussed further below:

- IFRS 16 'Leases' (issued on 13 January 2016)

Accounting policies

IFRS 16 'Leases'

The group adopted IFRS 16 on 1 April 2019, applying the modified retrospective transitional approach permitted by the standard in which both the right-of-use assets and lease liabilities brought onto the balance sheet were based on the present value of future lease payments at the adoption date calculated using the appropriate discount rate at 1 April 2019. Prior year comparatives have not been restated. The group has utilised the practical expedient permitted by the standard whereby a single discount rate has been applied to portfolios of leases with reasonably similar characteristics. Following initial adoption of the standard, lease liabilities and right-of-use assets for new leases are based on the appropriate discount rate at the date the new contract is entered into.

The value of right-of-use assets and lease liabilities brought onto the balance sheet on 1 April was £54.4 million; there has been no effect on retained earnings at the adoption date. The income statement charge during the year ending 31 March 2020 has been £3.5 million, split between £1.9 million of depreciation of the right-of-use assets and £1.6 million in relation to the finance charge recognised on the lease liabilities. This compares with £3.3 million of operating lease expenses that would have been recognised under IAS 17.

At 31 March 2020, the value of right-of-use assets included within property, plant and equipment was £54.7 million and the value of lease liabilities included within borrowings was £57.6 million, of which £54.7 million was classified as non-current and £2.9 million was classified as current. As part of the group's transition to IFRS 16 an exercise was carried out to assess whether contracts it has entered into are, or contain, leases as defined by the new standard. This has resulted in some differences between the population of contracts identified as containing leases under previous accounting standards, and for which operating lease commitments were disclosed at 31 March 2019, and the population of contracts deemed to contain leases under IFRS 16. Had all operating lease commitments disclosed under previous accounting standards at 31 March 2019 been recognised as leases under IFRS 16, by discounting future lease payments using the group's weighted average incremental borrowing rate applied to lease liabilities of 3.09 per cent, the right-of-use assets and lease liabilities brought onto the balance sheet would have been £18.0 million higher. Expenses relating to those contracts that do not contain leases within the scope of IFRS 16 continue to be recognised as operating expenses in the income statement over the term of the agreement.

The typical items which the group leases include land, buildings, operational assets and vehicles. The right-of-use assets and lease liabilities are both based on the present value of lease payments due over the term of the lease, with the asset being depreciated in accordance with IAS 16 'Property, Plant and Equipment' and the liability increased for the accretion of interest (being the unwinding of the discounting applied to the future lease payments) and reduced by lease payments.

The key judgements associated with applying this standard relate to the identification and classification of contracts containing a lease within the scope of IFRS 16 and the discount rate to use in calculating the present value of future lease payments on which the reported lease liability and right-of-use asset is based when it is not implicit in the lease contract.

Due to the nature of the group's operations, many of the current leases have long remaining terms, which causes the discount rate to be a key factor in determining the value of the lease liability. When the interest rate is not implicit in the lease, which is the case for materially all of the group's leases recognised under IFRS 16, the discount rate which is used is based on the relevant group company's nominal incremental borrowing rate adjusted for the payment profile and term of each lease.

The group has applied recognition exemptions permitted by the standard in relation to short-term leases and leases of low-value items.

The adoption of IFRS 16 has not impacted the group's ability to comply with any banking or financing covenants. Clarifications on the application of IFRS 16 made in IFRIC agenda decisions during the year ('Subsurface rights' – June 2019; 'Lessee's incremental borrowing rate' – September 2019; 'Lease term and useful life of leasehold improvements' – November 2019; 'Definition of a lease – decision making rights' – January 2020) have not affected our application of the standard.

Accounting policies

Early adopted new and revised standards

Interest Rate Benchmark Reform: Amendments to IFRS 9, IAS 39 and IFRS 7

In January 2020, the EU endorsed the IASB-published amendments to IFRS 9 ‘Financial Instruments’, IAS 39 ‘Financial Instruments: Recognition and Measurement’ and IFRS 7 ‘Financial Instruments: Disclosures’ in respect of interest rate benchmark reform, effective for annual periods beginning on or after 1 January 2020 with early adoption permitted. These amendments provide temporary exceptions from applying specific hedge accounting requirements where a hedging relationship is directly or indirectly affected by the market-wide interest rate benchmark reform, where certain financial market benchmark reference rates (such as LIBOR) will be required to be changed to nearly risk-free alternative rates.

As the group has a significant proportion of debt and derivative financial instruments designated in fair value hedge relationships that are linked to LIBOR, which is expected to be replaced by an alternative interest rate benchmark after 2021, these amendments are applicable to the group’s hedge accounting. The temporary exceptions provided for in the amendments mean that no changes to the group’s hedge accounting are expected to the extent that they are impacted by interest rate benchmark reform. In accordance with the published provisions, these amendments are adopted retrospectively to hedging relationships that existed at the start of the reporting period. The relief set out in this amendment will end at the earlier of when the uncertainty regarding the timing and amount of interest rate benchmark-based cash flows is no longer present, or the discontinuation of the hedging relationship.

The group’s treasury function is actively considering and preparing for the potential implications of interest rate benchmark reform in anticipation of any changes.

Critical accounting judgements and key sources of estimation uncertainty

In the process of applying its accounting policies set out in note A8, 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.

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. The group has considered the potential financial statement impacts, including asset lives and impairments and identified that the environmental impact of certain bioresources assets were considered as part of the strategic review leading to the conclusion that the chances of any future economic benefit being derived from these assets is now considered remote and resulting in accelerated depreciation as set out in the Property, Plant and Equipment section below.

On an ongoing basis, the group evaluates its estimates using historical experience, consultation with experts and other methods considered reasonable in the particular circumstances. 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.

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 judgement - The group recognises revenue generally at the time of delivery and when collection of the resulting receivable is reasonably assured. When 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 reasonably assured. There are two different criteria whereby management does not

Accounting policies

recognise revenue for amounts which have been billed to the customer on the basis that collectability is not reasonably assured. 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; however, has previously had statements de-recognised and has more than their current year debt outstanding.

This two-criteria approach resulted in £19.4 million reduction in revenue compared with what would have been recognised had no adjustment been made for amounts where collectability is not reasonably assured. 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 reasonably assured (i.e. the second criteria were disapplied), the required adjustment to revenue would have been £8.5 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, amongst 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 2020, the allowance for doubtful receivables relating to household customer debt of £49.4 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 £2.3 million or reduced by £0.8 million respectively.

In the current year, the expected future impact of the COVID-19 pandemic on the ability of some customers to pay their bills has specifically been taken into consideration as part of the expected credit loss assessment for trade receivables. This has given rise to a further £16.7 million incremental increase in the allowance for expected credit losses based on judgements around the likely impact of the pandemic on the non-payment risk profile of the group's customer base on a segmented basis. Scenarios have been modelled based on a moderate, shorter-term pandemic impact, and a more severe and longer-lasting impact. In arriving at the £16.7 million increase, the outcomes of these scenarios have been weighted on a 50:50 basis representing management's best estimate of their relative probability. If this weighting were 70:30 towards either the more severe scenario or the more moderate scenario, the incremental allowance relating to the COVID-19 pandemic would be +/- £1.6 million respectively.

Accounting estimate – the company 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 date of the last 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 2020 was £54.6 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 £4.5 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.

Revenue in relation to wholesale charges billed to non-household retailers is recognised based on a series of settlement statements produced by the Central Market Operating System (CMOS). These statements are based on a combination of meter readings and estimated consumption. Due to the iterative nature of the settlement process, the final wholesale charge for a period is not known until 16 months after that period. Accordingly, an estimate of credit notes that may need issuing in the future, for example where future statements include allowances or premises subsequently marked as vacant, is required. The estimated credit note provision is based on an analysis of historic changes to wholesale charges as

Accounting policies

settlement statements are received. At 31 March 2020, the credit note provision, and therefore the revenue not recognised in relation to billed amounts, was £21.5 million.

Due to temporary business closures required as a result of lockdown measures introduced by the UK Government during March 2020, the level of non-household consumption fell significantly in the final two weeks of March. As part of its measures to protect liquidity within the non-household market, Ofwat introduced a change to the market code to allow retailers to temporarily mark premises as vacant where they had been forced to close. Due to the timing of the code change, the impact of increased vacancy had not flowed through to CMOS billing reports at the end of March 2020, an estimate of the expected reduction in revenue compared with what was billed for March 2020 has, therefore, been required. The level of revenue not recognised since lockdown measures began, is £7.1 million based on estimates received from retailers pending a full analysis, reduction in consumption during this period. If actual consumption was 20 per cent lower in this period the revenue not recognised would have been around £5.5 million, and if actual consumption were 40 per cent lower the revenue not recognised would have been around £8.7 million.

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 67 per cent of total spend in relation to infrastructure assets during the year. A change of +/- one per cent would have resulted in £4.4 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 44 per cent of total support costs. A change in allocation of +/- 10 per cent would have resulted in £5.6 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, although historically few changes to estimated useful economic lives have been required, during the current year PPE with a net book value of £82.3 million was written down to £nil following a review of the group’s bioresources strategy, which concluded that because of improvements in alternative lower-cost and more environmentally friendly process the likelihood of these assets generating future economic benefit is now considered to be remote. As such these assets are deemed to have reached the end of their useful economic lives earlier than previously anticipated. Excluding tis accelerated depreciation, the depreciation and amortisation expense for the year was £397.9 million. A 10 per cent increase in average asset lives would have resulted in a £37.4 million reduction in this figure and a 10 per cent decrease in average asset lives would have resulted in a £42.7 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 policies

Accounting estimate - Included within the group's defined benefit pension scheme assets are assets with a fair value estimated to be £232.1 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 2020. The fair value of these assets has been estimated based on the latest available observable prices, updated with reference to movements in comparable observable indices to the reporting date, and adjusted for judgements to reflect differences in the liquidity and credit components of the asset pricing. Judgement is required in estimating the fair value of these assets, with the values estimated to fall within a range of £219 million and £245 million.

Joint ventures – Water Plus

Accounting judgement – The group's financial interests in Water Plus Group Limited, a joint venture with Severn Trent PLC, comprise an investment in the ordinary shares of Water Plus, and loans issued to the joint venture in the form of revolving credit facilities and a zero coupon shareholder loan note, further details of which are included in note A6. Judgement is required in determining whether these loans form part of the group's long term interest in Water Plus whose value would be reduced in accordance with the group's share of joint venture losses in excess of the value of its equity investment when applying the equity method in accordance with IAS 28 'Investments in Associates and Joint Ventures'. As they bear interest, have a relatively near-term expiry date and tend to fluctuate as amounts are drawn down and repaid, the revolving credit facilities are not considered to be part of the group's long-term interest in Water Plus. In contrast, the zero coupon shareholder loan notes are considered to be part of the group's long-term interest given that they do not bear interest and have a longer-term maturity. Had an alternative judgement been applied such that the revolving credit facilities were considered to be part of the group's long-term interest in Water Plus, the group's £5.3 million unrecognised share of Water Plus's losses for the year (see note 12) would have been recognised in the income statement resulting in a higher share of losses from joint ventures, and the carrying value of the amount owed by Water Plus in respect of the revolving credit facility (see note A6) would have been reduced by this amount. Similarly, had an alternative judgement been applied such that the zero coupon shareholder loan note were not considered to be part of the group's long-term interest in Water Plus, the group's share of Water Plus losses for the year would have been £9.5 million lower.

Accounting estimate – During the year, the impact of the COVID-19 pandemic crystallised an impairment of £51.1 million in Water Plus, which was recognised in relation to the joint venture's goodwill and certain intangible assets and was a significant contributor to Water Plus's losses for the year, of which the group has allocated its share against its equity investment and other long-term interest in the joint venture. The impairment assessment undertaken by the management of Water Plus was calculated based on the company's value in use, determined by discounting the estimated future cash flows of the Water Plus business to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the business. The inputs into the value in use assessment were subject to judgements in respect of the future cash flows included in the Water Plus fiveyear business plan, discount rate, and terminal growth rate. If the future cash flows were 10 per cent higher than those included in the Water Plus impairment assessment this would have resulted in a £12.0 million reduction in the group's share of Water Plus losses, eliminating the £5.3 million unrecognised loss and reducing by £6.7 million the share of Water Plus losses recognised by the group. This would have resulted in a corresponding £6.7 million increase in the carrying value of the zero coupon shareholder loan notes forming part of the group's long-term interest in Water Plus. If the future cash flows had been 10 per cent lower this would have resulted in the group's unrecognised share of losses increasing by £12.0 million.

Accounting estimate – The significant economic impact of the COVID-19 pandemic has given rise to a significant increase in credit risk in respect of loans extended to Water Plus. Accordingly, these balances have been assessed for expected credit losses, which have been estimated based on a forward-looking economic assessment derived from Water Plus's latest board-approved business plan out to 2025, assuming a 2 per cent growth rate beyond this point and Water Plus securing external financing of a portion of its working capital in the year ending 31 March 2023. A 2.5 per cent (1 in 40 years) probability of a loss event occurring in a given year during which loan balances are assumed to be outstanding has been considered against the forward-looking economic assessment and applied against the assumed outstanding loan balances. Various scenarios have then been modelled based on higher and lower generation of free cash that could be used to repay the loans, and these have been probability-weighted to

Accounting policies

give an expected credit loss estimated at £5.0 million as at 31 March 2020. Within the expected credit loss assessment the most significant source of estimation uncertainty is considered to be the level of trade receivables that could be recovered in the event of Water Plus suffering a liquidation event, with the group having estimated that 70 per cent of Water Plus's gross trade receivables could be recovered. If the recovery rate were 60 per cent, the group's expected credit losses in respect of loans to Water Plus would have been £2.1 million higher, and if the recovery rate were 80 per cent the group's expected credit losses would have been £2.2 million lower.

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.

Notes to financial statements

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 predominantly arises from the provision of services within the United Kingdom, with less than one per cent of external revenue and non-current assets being overseas.

	2020 £m	2019 £m
Wholesale water charges	784.8	767.3
Wholesale wastewater charges	939.5	905.8
Residential retail charges	83.8	86.7
Other	51.2	58.6
	1,859.3	1,818.5

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 removing and treating 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.

Notes to financial statements

3. Directors and employees

Directors' remuneration

	2020 £m	2019 £m
Salaries	1.7	1.9
Benefits	0.4	0.4
Bonus	0.8	1.0
Share-based payment charge	1.0	2.4
	3.9	5.7

Included within the above are aggregate emoluments of £2.3 million (2019: £2.3 million) in respect of the highest paid director.

No directors accrued benefits under defined benefit schemes during the current year (2019: no directors). All directors opted for a cash allowance in lieu of their company pension scheme entitlement (2019: all directors).

Three directors (2019: four directors) received shares in United Utilities Group PLC in respect of qualifying services. Three directors (2019: four directors) had long-term incentive plans which vested during the year. Aggregate amounts receivable relating to long-term incentive plans of £1.5 million (2019: £1.1 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 2020 Annual report and financial statements.

Remuneration of key management personnel

	2020 £m	2019 £m
Salaries and short-term employee benefits	6.7	5.5
Severance	-	-
Post-employment benefits	-	-
Share-based payment charge	1.3	3.1
	8.0	8.6

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

Notes to financial statements

3. Directors and employees (continued)

Employee benefits expense (including directors)

Group	2020 £m	2019 £m
Wages and salaries	229.6	234.2
Employee related taxes and levies	23.8	24.1
Severance	7.2	4.8
Post-employment benefits:		
Defined benefit pension expense (see note 18)	12.3	18.0
Defined contribution pension expense (see note 18)	22.5	23.0
	34.8	41.0
Charged to regulatory capital schemes	(134.0)	(134.5)
Employee benefits expense	161.4	169.6

Within employee benefits expense there were £11.8 million (2019: £7.2 million) of restructuring costs.

In the prior year, £6.6 million of costs associated with the equalisation of Guaranteed Minimum Pension (GMP) benefits were recognised, along with £1.4 million of costs incurred in relation to the group's response to the severe dry weather event experienced during the year.

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 2020 UUG Annual report and financial statements. Included within wages and salaries is an expense of £1.5 million (2019: £4.0 million) relating to a recharge of share-based payment costs from the ultimate parent undertaking.

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

Group	2020 number	2019 number
Average number of employees during the year	5,302	5,267

Company

The average number of employees during the year was 211 (2019: 239). These employees were engaged in the provision of services to United Utilities Water Limited, and as such employee costs of £17.0 million (2019: £20.1 million) in relation to these employees have been incurred directly by that company during the year.

Notes to the financial statements

4. Operating profit

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

	2020 £m	2019 £m
Other operating costs		
Hired and contracted services	96.6	112.2
Property rates	78.9	94.7
Materials	75.9	77.8
Power	75.1	72.8
Regulatory fees	28.3	32.5
Loss on disposal of property, plant and equipment	13.9	3.9
Cost of properties disposed	0.4	4.7
Settlement of commercial claims	-	(9.9)
Other expenses	34.3	34.1
	403.4	422.8
Allowance for expected credit losses – trade and other receivables		
Allowance for expected credit losses – trade and other receivables (see note 14)	41.8	26.5
	41.8	26.5
Other income		
Other income	(3.4)	(3.6)
	(3.4)	(3.6)
Depreciation and amortisation expense		
Depreciation of property, plant and equipment (see note 9)	441.6	357.3
Amortisation of intangible assets (see note 10)	41.2	35.9
	482.8	393.2

Included within depreciation of property, plant and equipment for the current year is £82.3 million relating to the accelerated depreciation of certain bioresources assets, primarily incineration assets at the group's Mersey Valley Sludge Processing Centre, known as Shell Green. These assets have been fully depreciated in the year following a strategic bioresources review, as the likelihood of the group deriving future economic benefit from them is now considered remote in light of improvements in alternative lower-cost and more environmentally friendly processes. In addition to this, inventory spares held for use by these assets have been written down to £nil.

During the current year, the group incurred operating costs of £19.2 million relating to the COVID-19 pandemic, comprising £16.7 million in relation to allowances for expected credit losses in respect of household trade receivables and £1.4 million allowances for expected credit losses in respect of non-household trade receivables, and £1.1 million of other operating costs.

Property rates expenses in the current year include the impact of an £8.1 million refund in relation to rates paid in previous years resulting from a revision to the rateable value of the group's water assets as agreed with the Valuation Office Agency (VOA). This reduction ensures that the cumulative property rates paid by the group are appropriately recorded. In addition to this, accrued property rates relating to wastewater assets have been reassessed during the current year resulting in an £8.2 million reduction in rates costs reflecting properties identified as being non-rateable and management's revised estimate of the likely rates payable on properties whose rateable values are yet to be assessed.

During the current year, operating costs of £3.1 million and infrastructure renewals expenditure of £4.7 million were incurred in response to Storms Ciara and Dennis that occurred in February 2020.

Notes to the financial statements

4. Operating profit (continued)

During the prior year, as a result of the group's response to a severe dry weather event, there were £36.1 million of expenses incurred, comprising £24.2 million of other operating costs, £10.1 million of infrastructure renewals expenditure and £1.4 million of employee costs (see note 3).

Research and development expenditure for the year ended 31 March 2020 was £1.0 million (2019: £1.2 million).

Other income relates primarily to property rental income.

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

	2020 £000	2019 £000
Audit services:		
Statutory audit - group and company	105	85
Statutory audit - subsidiaries	315	310
	420	396
Non-audit services:		
Regulatory audit services provided by the statutory auditor	62	47
Other non-audit services	77	65
	559	507

5. Investment income

	2020 £m	2019 £m
Interest receivable on short-term bank deposits held at amortised cost	6.0	3.3
Interest receivable on loan to joint ventures held at amortised cost (see note A6)	4.0	4.3
Net pension interest income (see note 17)	14.0	9.5
Interest receivable from ultimate parent undertaking (see note A6)	32.9	30.5
	56.9	47.6

Notes to the financial statements

6. Finance expense

	2020 £m	2019 £m
Interest payable		
Interest payable on borrowings held at amortised cost(1)	231.7	232.0
	231.7	232.0
Fair value losses/(gains) on debt and derivative instruments		
Fair value hedge relationships:		
Borrowings(2)	87.1	47.4
Designated swaps(2) (3)	(68.6)	(29.7)
	18.5	17.7
Financial instruments at fair value through profit or loss:		
Borrowings designated at fair value through profit or loss(4)	57.8	32.8
Associated swaps(5) (6)	(49.8)	(37.1)
	8.0	(4.3)
Fixed interest rate swaps(5)	52.3	19.1
Net receipts on derivatives and debt under fair value option	(15.3)	(40.6)
Inflation swaps(5)	13.4	-
Other	(0.7)	(1.4)
	49.7	(22.9)
Net fair value losses/(gains) on debt and derivative instruments(6)	76.2	(9.5)
	307.9	222.5

Notes:

(1) Includes a £100.8 million (2019: £98.3 million) non-cash inflation uplift expense in relation to the group's index-linked debt and £1.6 million (2019: £nil) interest expense on lease liabilities, representing the unwinding of the discounting applied to future lease payments.

(2) Includes foreign exchange losses of £14.8 million (2019: £37.6 million gains), excluding those on instruments measured at fair value through profit or loss. These gains/losses are largely offset by fair value losses/gains on derivatives.

(3) Under the provisions of IFRS 9 'Financial instruments', changes in fair value resulting from changes to the foreign currency basis spread (£1.3 million gain) are recognised in other comprehensive income rather than profit or loss as they relate to items designated in an accounting hedge relationship (2019: £2.2 million loss).

(4) Under the provisions of IFRS 9 'Financial instruments', a £34.2m gain (2019: £6.6 million gain) due to changes in the group's own credit risk (£6.6 million gain) 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, as a result, 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 £16.0 million income (2019: £30.6 million) due to net interest on derivatives and debt under fair value option and £0.5 million income (2019: £nil) due to non-cash inflation uplift on index-linked derivatives.

Interest payable is stated net of £40.6 million (2019: £37.4 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 a capitalisation rate of 3.2 per cent (2019: 3.1 per cent) to expenditure on such assets as prescribed by IAS 23 'Borrowing Costs'.

In addition to the £308.0 million finance expense, a £5.0 million allowance for expected credit losses was recognised during the year (2019: £nil) in respect of loans to the group's joint venture, Water Plus (see note A6 for further details).

Notes to the financial statements

7. Tax

	2020 £m	2019 £m
Current tax		
UK corporation tax	57.3	47.4
Adjustments in respect of prior years	(12.2)	(2.8)
Total current tax charge for the year	45.1	44.6
Deferred tax		
Current year	16.4	35.4
Adjustments in respect of prior years	5.6	(1.4)
	22.0	34.0
Change in tax rate	135.5	-
Total deferred tax charge for the year	157.5	34.0
Total tax charge for the year	202.6	78.6

The deferred tax charge of £135.5 million (2019: £nil) reflects the Government's reversal of the planned reduction in the rate of corporation tax from 19 per cent to 17 per cent from 1 April 2020.

The adjustments in respect of prior years relate to agreement of prior years' UK tax matters.

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:

	2020 £m	2020 %	2019 £m	2019 %
Profit before tax	336.2		466.7	
Tax at the UK corporation tax rate	63.8	19.0	88.7	19.0
Adjustments in respect of prior years	(6.6)	(2.2)	(4.2)	(1.0)
Change in tax rate	135.5	44.7	-	-
Net expense/(income) not taxable	9.9	3.2	(1.8)	(0.4)
Deferred tax rate adjustment	-	-	(4.1)	(0.9)
Total tax charge and effective tax rate for the year	202.6	64.7	78.6	16.7

The prior year deferred tax rate adjustment comprises the deferred tax movement calculated at the then future tax rate from April 2020 of 17 per cent rather than the current rate of 19 per cent.

In the prior year, there is also an adjustment for items included in retained earnings, following the adoption of IFRS 15.

The increase in the net expense not taxable is mainly due to the increase in losses from our joint venture interest in Water Plus.

Notes to the financial statements

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:

	2020	2019
	£m	£m
Profit before tax	336.2	466.7
Profit before tax multiplied by the standard rate of UK corporation tax of 19%	63.8	88.7
Relief for capital allowances in place of depreciation	(82.1)	(91.0)
Disallowance of depreciation charged in the accounts	81.6	64.8
Financial transactions timing differences	11.7	1.0
Pension timing differences	(22.5)	(11.7)
Relief for capitalised interest	(7.7)	(7.1)
Other timing differences	2.6	4.5
Adjustments to tax charge in respect of prior years	(12.2)	(2.8)
Joint venture losses/(profits)	7.2	(1.3)
Expenses not deductible/(income not taxable) for tax purposes	0.5	(1.8)
Depreciation charged on non-qualifying assets	2.2	1.3
Current tax charge for the year	45.1	44.6

The group's current tax charge is 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 lower than the prior year due to the atypical bioresources asset write down in the period, together with the reduction in the rate of long life plant and machinery tax allowances from 8 per cent to 6 per cent from April 2019.

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 of £22.5 million was higher than the prior year mainly due to the company making accelerated deficit repair contributions of £103.0 million in April 2019.

The current year adjustments to tax charge in respect of prior years of £12.2 million was higher than the prior year mainly due to the agreement of various capital allowance matters from earlier years.

The joint venture profits in the prior year are mainly our share of profits relating to AS Tallinna Vesi. In the current year, the AS Tallinna Vesi profits are offset by our share of the losses in relation to Water Plus.

Notes to the financial statements

7. Tax (continued)

Tax on items taken directly to equity

Group	2020 £m	2019 £m
Deferred tax (see note 19)		
On remeasurement gains on defined benefit pension schemes	150.0	12.4
Adjustments in respect of prior years on net fair value gains	2.4	-
On net fair value gains recognised in other comprehensive income	6.7	0.8
Total tax charge on items taken directly to equity	159.1	13.2

Company	2020 £m	2019 £m
Deferred tax (see note 19)		
On remeasurement gains on defined benefit pension schemes	35.8	0.8
Total tax charge on items taken directly to equity	35.8	0.8

The tax adjustments taken to equity primarily relate to remeasurement movements on the group's defined benefit pension schemes including the adjustment arising from a change in the rate at which the deferred tax liabilities are measured, from 17 per cent to 35 per cent. This change in rate reflects a revised judgement as to the most likely method by which the defined benefit pension surplus would be realised. Whereas previously it was assumed that the surplus could be realised through a reduction in future contributions, management now consider 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:

	2020 £m	2019 £m
Ordinary shares		
Final dividend for the year ended 31 March 2019 at 21.29 pence per share (2018: 20.49 pence)	187.7	180.6
Interim dividend for the year ended 31 March 2020 at 10.98 pence per share (2019: 10.64 pence)	96.8	93.8
	284.5	274.4

Notes to the financial statements

9. Property, plant and equipment

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 2018	367.2	5,386.3	7,250.8	526.6	1,228.4	14,759.3
Additions	5.5	60.8	126.3	11.6	522.0	726.2
Transfers	(12.1)	43.3	87.3	6.5	(125.0)	-
Disposals	(0.9)	-	(42.3)	(6.5)	-	(49.7)
At 31 March 2019	359.7	5,490.4	7,422.1	538.2	1,625.4	15,435.8
Opening balance adjustment on adoption of IFRS 16	48.6	-	4.4	1.4	-	54.4
Additions	6.0	140.5	157.5	10.1	445.4	759.5
Transfers	6.0	131.1	358.8	24.1	(520.0)	-
Disposals	(13.6)	(31.5)	(251.2)	(13.1)	-	(309.4)
At 31 March 2020	**406.7**	**5,730.5**	**7,691.6**	**560.7**	**1,550.8**	**15,940.3**
Accumulated depreciation						
At 1 April 2018	119.7	385.4	3,092.3	371.4	-	3,968.8
Charge for the year	8.3	35.4	279.3	34.3	-	357.3
Transfers	(0.5)	0.5	-	-	-	-
Disposals	(0.6)	-	(37.7)	(5.4)	-	(43.7)
At 31 March 2019	126.9	421.3	3,333.9	400.3	-	4,282.4
Charge for the year	9.8	44.4	353.5	33.9	-	441.7
Disposals	(13.5)	(31.2)	(237.1)	(12.8)	-	(294.6)
At 31 March 2020	**123.2**	**434.5**	**3,450.3**	**421.4**	**-**	**4,429.4**
Net book value at 31 March 2019	232.8	5,069.1	4,088.2	137.9	1,625.4	11,153.4
Net book value at 31 March 2020	**283.5**	**5,296.0**	**4,241.3**	**139.3**	**1,550.8**	**11,510.9**

Included within the net book value of property, plant and equipment at 31 March 2020 is £57.4 million relating to leased assets. Further details of the group's leases are disclosed in note 17.

During the year ended 31 March 2019, there was a transfer of £17.8 million and associated £0.5 million accumulated depreciation from land and buildings to infrastructure assets following a data cleanse exercise in respect of the fixed asset register.

At 31 March 2020, the group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to £432.6 million (2019: £300.7 million).

In addition to these commitments, the group has long-term expenditure plans which include investments to achieve improvements in performance required by the regulators and to provide for future growth.

Notes to the financial statements

9. Property, plant and equipment

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 £0.2 million was charged during the year, resulting in a net book value of £3.0 million at 31 March 2020.

The company had no property, plant and equipment at 31 March 2019.

The company had no contractual commitments for the acquisition of property, plant and equipment at 31 March 2020 or 31 March 2019.

10. Intangible assets

	Total
Group	£m
Cost	
At 1 April 2018	395.6
Additions	40.9
At 31 March 2019	436.5
Additions	27.6
Disposals	(22.7)
At 31 March 2020	441.4
Accumulated amortisation	
At 1 April 2018	197.9
Charge for the year	35.9
At 31 March 2019	233.8
Charge for the year	41.2
Disposals	(22.6)
At 31 March 2020	252.4
Net book value at 31 March 2019	202.7
Net book value at 31 March 2020	189.0

The group’s intangible assets relate mainly to computer software.

At 31 March 2020, the group had entered into contractual commitments for the acquisition of intangible assets amounting to £2.6 million (2019: £1.5 million).

Company

The company had no intangible assets or contractual commitments for the acquisition of intangible assets at 31 March 2020 or 31 March 2019.

Notes to the financial statements

11. Investment in joint ventures

Group	Total £m
At 1 April 2018	75.2
Share of profits of joint ventures	6.7
Dividends received from joint ventures	(2.2)
Currency translation differences	(0.7)
At 31 March 2019	79.0
Share of losses of joint ventures	(38.1)
Less: losses allocated to other components of long-term interest	9.5
Dividends received from joint ventures	(4.9)
Currency translation differences	1.3
At 31 March 2020	**46.8**

The group's interests in joint ventures mainly comprise its 50 per cent interest in Water Plus Group Limited (Water Plus) and its 35.3 per cent interest in AS Tallinna Vesi (Tallinn Water). Water Plus is jointly owned and controlled by the group and Severn Trent PLC under a joint venture agreement. Joint management of Tallinn Water is based on a shareholders' agreement.

The group's total share of Water Plus losses for the year was £51.5 million (2019: £0.4 million share of losses), of which £46.2 million has been recognised in the Income Statement and £5.3 million has not been recognised as at 31 March 2020 (2019: £nil not recognised). The £46.2 million recognised share of losses comprises £36.7 million that has been allocated to the group's equity investment, and £9.5 million allocated to the zero coupon shareholder loan notes extended to Water Plus as these form part of the group's long-term interest in the joint venture. The share of losses recognised against each component of the group's net investment in Water Plus has reduced each of them to £nil at 31 March 2020. Of the £46.2 million recognised share of losses, £32.0 million represents the group's recognised share of Water Plus's losses relating to the COVID-19 pandemic, including the crystallisation of an impairment of goodwill and certain other intangible assets recognised by Water Plus, and a significant incremental charge to recognise additional expected credit losses in relation to trade and other receivables. The remaining £14.2 million relates to the group's share of Water Plus's underlying loss for the year

As at 31 March 2020, the carrying value of the group's 35.3 per cent interest in Tallinn Water was £46.8 million (2019: £42.4 million). Tallinn Water recognised a provision of EUR 13.2 million in its latest financial statements relating to possible third-party claims. The maximum potential undiscounted payments if potential claims were recognised by the courts would amount to EUR 33.1 million. If the value of actual

claims exceed the amount provided in the future this would impact the group's share of profits of the joint venture and the joint venture's carrying value under the equity method of accounting in the period in which this occurs.

Other than the fact that at 31 March 2020 Water Plus did not have any distributable reserves, there are no restrictions on the ability of the group's joint ventures to transfer funds to the group in the form of cash dividends, or to repay loans or advances made by the group.

Details of transactions between the group and its joint ventures are disclosed in note A6.

Company

At 31 March 2020, the company had investments in joint ventures of £nil (2019: £39.1 million) relating entirely to its investment in Water Plus, which is held at cost less provision for impairment in the company's separate financial statements. This reflects a £39.1 million impairment recognised in relation to this investment during the year following a deterioration in the working capital position of Water Plus since the non-household water retail market in England opened to competition on 1 April 2017, and in light of the significant impact of the COVID-19 pandemic on the non-household market and its participants. No impairment in relation to the investment in the joint venture had been recognised in previous years.

Notes to the financial statements

11. Investment in joint ventures (continued)

The carrying value of the Company's interest in Water Plus was assessed relative to its estimated recoverable amount in order to determine whether it is impaired. In performing this assessment, consideration has been given to information provided by Water Plus, including the results of its own impairment testing carried out in respect of its goodwill and intangible assets in accordance with IAS 36 'Impairment of Assets'. Having reviewed and challenged this information, the recoverable amount was determined to be £nil at 31 March 2020.

The recoverable amount has been calculated based on Water Plus's fair value less costs of disposal, being the price that would be received on the sale of the investment in an orderly transaction between market participants at 31 March 2020. As there is no readily observable market price for Water Plus, the investment represents a 'level 3' asset, whose price has been calculated based on Water Plus's value in use on the assumption that a market participant would acquire Water Plus with a view to operating it into the future. This has been determined by discounting the estimated future cash flows of the Water Plus business to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the business, for which estimates of future cash flows have not been adjusted.

The cash flows used in the value in use assessment go out to 31 March 2025, with a terminal growth rate of 2.0 per cent applied at this date based on long-term projections of CPIH, to which Water Plus's cash flows tend to be aligned. These cash flows were based on Water Plus's five-year business plan as agreed with its board, with an overlay applied to take account of the expected impact of the COVID-19 pandemic, which is expected to have a significant impact. This calculation of Water Plus's value in use gave rise to a negative equity valuation of £17.7 million. Accordingly, the investment in the joint venture has been written down to £nil.

As the company does not account for its investments in joint ventures using the equity method, unlike in the consolidated group's financial statements the zero coupon shareholder loan notes are not considered to be part of the company's long-term interest in Water Plus subject to impairment or write down to reflect a share of the joint venture's losses. These zero coupon shareholder loan notes are instead subject only to an assessment for expected credit losses in accordance with IFRS 9 'Financial Instruments'. See note A6 for further details.

12. Other investments

Group	Total £m
At 1 April 2018	7.1
Change in fair value	4.4
Reduction in investment stake	(1.0)
Currency translation differences	1.0
At 31 March 2019	11.5
Change in fair value	0.6
Reduction in investment stake	(1.1)
Disposal of investment	(10.9)
Currency translation differences	-
At 31 March 2020	**0.1**

On 3 December 2019, the group completed its disposal of its overseas investment in the Muharraq sewerage treatment plant (STP). Consideration for the disposal was equal to the fair value at which the asset was carried resulting in no gain or loss on disposal.

Notes to the financial statements

12. Other investments (continued)

Company	Shares in subsidiary undertakings £m
At 1 April 2018	4,176.1
Impairment	(1.6)
Disposal	(166.2)
At 31 March 2019	4,008.3
Reversal of impairment	6.6
Net book value at 31 March 2019	4,014.9

During the year ended 31 March 2020, impairments of £1.6 million and £5.0 million recognised in the years ended 31 March 2019 and 31 March 2018 respectively in relation to the company's investment in United Utilities (Tallinn) B.V. reversed. This was due to an increase in the fair value of that company's investment in AS Tallinna Vesi.

During the year ended 31 March 2019, the company disposed of a £166.2 million investment in the ordinary shares of United Utilities Utility Solutions Holdings Limited ("UUUSHL"). This was achieved through UUUSHL, which had undertaken a capital reduction, distributing £239.7 million to the company as a dividend prior to being liquidated. The dividend was settled as a reduction in the intercompany balances between the two entities; no cash was transferred as part of this transcation. This resulted in the company recognising a profit on disposal of this investment of £73.4 million during the year.

13. Inventories

Group	2020 £m	2020 £m
Properties held for resale	4.5	4.7
Other inventories	12.1	10.2
	16.6	14.9

Company

The company had no inventories at 31 March 2020 or 31 March 2019.

14. Trade and other receivables

		Group		Company
	2020 £m	2019 £m	2020 £m	2019 £m
Trade receivables	81.2	102.2	-	0.2
Amounts owed by subsidiary undertakings	-	-	1,679.0	1,401.3
Amounts owed by ultimate parent undertaking (see note A6)	1,764.1	1,730.8	1,764.1	1,730.8
Amounts owed by other related parties (see note A6)	147.9	182.9	9.5	42.1
Other debtors and prepayments	39.1	34.4	-	-
Accrued income	74.7	78.1	-	-
	2,107.0	2,128.4	3,452.6	3,174.4

Notes to the financial statements

14. Trade and other receivables (continued)

At 31 March 2020 the group had £1,849.1 million (2019: £1,866.5 million) and the company had £1,761.5 million (2019: £1,760.6 million) of trade and other receivables classified as non-current. These included £1,752.0 million (2019: £1,718.4 million) relating to amounts owed by the ultimate parent undertaking and £9.5 million (2019: £42.1 million) relating to amounts owed by other related parties.

Amounts owed by subsidiary undertakings 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 2020 and 31 March 2019.

Trade receivables do not carry interest and are stated net of allowances for doubtful receivables, an analysis of which is as follows:

Group	2020 £m	2019 £m
At the start of the year	56.5	63.4
Amounts charged to operating expenses (see note 4)	41.8	26.5
Trade receivables written off	(28.0)	(33.4)
Amounts charged to deferred income	1.1	-
At the end of the year	71.4	56.5

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. In the current year, an allowance for expected credit losses of £18.1 million was recognised in relation to trade and other receivables reflecting the direct impact of the COVID-19 pandemic.

At 31 March 2020 and 31 March 2019, the group had no trade receivables that were past due and not individually impaired.

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	2020 £m	2019 £m
At the start of the year	95.9	95.2
Amounts charged to operating expenses	1.5	0.7
At the end of the year	97.4	95.9

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.

Notes to the financial statements

14. Trade and other receivables (continued)

The following table provides information regarding the ageing of trade receivables that were past due and individually impaired:

Group **At 31 March 2020**	Aged less than one year £m	Aged between one year and two years £m	Aged greater than two years £m	Carrying value £m
Gross trade receivables	72.8	31.6	43.4	147.8
Allowance for expected credit losses	(19.3)	(15.7)	(36.4)	(71.4)
Net trade receivables	53.5	15.9	7.0	76.4

At 31 March 2019	Aged less than one year £m	Aged between one year and two years £m	Aged greater than two years £m	Carrying value £m
Gross trade receivables	69.1	36.5	42.0	147.7
Allowance for expected credit losses	(5.3)	(10.9)	(40.2)	(56.5)
Net trade receivables	63.8	25.6	1.8	91.2

At 31 March 2020, the group had £4.8 million (2019: £11.0 million) of trade receivables that were not past due.

Company

At 31 March 2020 and 31 March 2019, the company had no trade receivables that were past due.

15. Cash and cash equivalents

	Group 2020 £m	2019 £m	**Company** 2020 £m	2019 £m
Cash at bank and in hand	33.0	4.7	0.0	0.1
Short-term bank deposits	495.1	334.6	25.0	12.0
Cash and short-term deposits	528.1	339.3	25.0	12.1
Book overdrafts (included in borrowings, see note 16)	(14.1)	(14.2)	-	-
Cash and cash equivalents in the statement of cash flows	514.0	325.1	25.0	12.1

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.

Notes to the financial statements

16. Borrowings

Group	2020 £m	2019 £m
Non-current liabilities		
Bonds	5,648.5	4,814.6
Bank and other term borrowings	1,814.9	2,301.0
Lease liabilities	54.7	-
	7,518.1	7,115.6
Current liabilities		
Bonds	-	441.9
Bank and other term borrowings	827.2	243.6
Book overdrafts (see note 15)	14.1	14.2
Lease liabilities	2.9	-
Amounts owed to ultimate parent undertaking	80.0	74.1
	924.2	773.8
	8,442.3	7,889.4

For further details of the principal economic terms and conditions of outstanding borrowings see note A3.

Company	2020 £m	2019 £m
Non-current liabilities		
Bonds	319.7	305.2
Lease liabilities	2.7	-
	322.4	305.2
Current liabilities		
Bonds	-	-
Bank and other term borrowings	120.0	100.0
Lease liabilities	0.3	-
Amounts owed to subsidiary undertakings	555.5	540.5
Amounts owed to ultimate parent undertaking	80.0	74.1
	758.5	714.6
	1,078.2	1,019.8

Borrowings are unsecured and are measured at amortised cost. The carrying amounts of borrowings approximate their fair value.

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 in the following table represents the future contractual lease payments on an undiscounted basis.

Notes to the financial statements

17. Leases (continued)

	Group 2020 £m	Group 2019* £m	Company 2020 £m	Company 2019* £m
Less than 1 year	2.9	-	0.3	-
1 to 5 years	8.9	-	1.1	-
5 to 10 years	9.7	-	1.4	-
10 to 25 years	25.2	-	0.7	-
25 to 50 years	40.5	-	-	-
50 to 100 years	80.1	-	-	-
100 to 500 years	106.9	-	-	-
Longer than 500 years	3.2	-	-	-
	277.4	-	3.5	-

*The group and company have chosen to use the modified retrospective transitional approach in adopting IFRS 16 'Leases', therefore prior year comparatives have not been restated.

Right-of-use assets are included within property, plant and equipment in the statement to financial position. Details of the right-of-use assets, by class of assets are as follows:

	Group 2020 £m	Group 2019* £m	Company 2020 £m	Company 2019* £m
Cost				
Property	37.0	-	3.2	-
Land	15.8	-	-	-
Operational assets	4.8	-	-	-
Vehicles	1.7	-	-	-
	59.3	-	3.2	-
Accumulated depreciation				
Property	0.8	-	0.2	-
Land	0.2	-	-	-
Operational assets	0.1	-	-	-
Vehicles	0.9	-	-	-
	2.0	-	0.2	-

*The group and company have chosen to use the modified retrospective transitional approach in adopting IFRS 16 'Leases', therefore prior year comparatives have not been restated.

Further details on additions and disposals of right-of-use assets can be found in note 9.

During the year ending 31 March 2020, £1.6 million of interest expense on lease liabilities was recognised, representing the unwinding of the discounting applied to future lease payments (see note 6).

The carrying amount of lease liabilities is included within borrowings (see note 16).

The total cash outflow for leases for the year ended 31 March 2020 was £3.3 million for the group, of which £1.6 million was payment of interest and £1.7 million payment of principal. Total cash outflows for the company were £0.2 million in relation to payments of principal.

Notes to the financial statements

18. Retirement benefit surplus

Defined benefit schemes

The net pension (income)/expense before tax recognised in the income statement in respect of the defined benefit schemes is summarised as follows:

		Group		Company
	2020 £m	2019 £m	2020 £m	2019 £m
Current service cost	6.1	6.2	0.5	1.1
Curtailments/settlements	4.6	9.0	1.0	1.1
Administrative expenses	1.6	2.8	0.6	1.0
Pension expense charged to operating profit	12.3	18.0	2.1	3.2
Net pension interest income credited to investment income (see note 5)	(14.0)	(9.5)	(3.1)	(2.2)
Net pension (income)/expense (credited)/charged before tax	(1.7)	8.5	(1.0)	1.0

Defined benefit pension costs excluding curtailments/settlements included within employee benefit expense were £7.7 million (2019: £9.0 million) for the group and £1.1 million (2019: £2.1 million) for the company, comprising current service costs and administrative expenses.

Total post-employment benefits expense excluding curtailments/settlements charged to operating profit of £30.2 million (2019: £32.0 million) for the group and £1.1 million (2019: £2.1 million) for the company comprise the defined benefit costs described above of £7.7 million (2019: £9.0 million) for the group and £1.1 million (2019: £2.1 million) for the company, and defined contribution pension costs of £22.5 million (2019: £23.0 million) for the group and £nil (2019: £nil) for the company (see note 3).

Included within curtailments/settlements is £nil (2019: £6.6 million) for the group and £nil (2019: £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		Company
	2020 £m	2019 £m	2020 £m	2019 £m
At the start of the year	483.9	344.2	110.1	80.1
Income/(expense) recognised in the income statement	1.7	(8.5)	1.0	(1.0)
Contributions	113.9	75.2	22.7	26.4
Remeasurement gains gross of tax	154.6	73.0	41.2	4.6
At the end of the year	754.1	483.9	175.0	110.1

Included in the group contributions paid of £113.9 million (2019: £75.2 million) and company contributions paid of £22.7 million (2019: £26.4 million) were deficit repair contributions for the group of £103.0 million (2019: £66.1 million) and for the company of £21.6 million (2019: £24.9 million), enhancements to benefits provided on redundancy for the group of £1.9 million (2019: £1.6 million) and for the company of £0.3 million (2019: £0.2 million), payments in relation to historic unfunded, unregistered retirement benefit schemes of £1.4 million (2019: £nil) for the group and £nil (2019: £nil) for the company, and administration expenses for the group of £0.4 million (2019: £0.5 million) and for the company of £0.2 million (2019: £0.2 million). Following the 2018 actuarial valuation, contributions in relation to current service cost remained stable at £7.2 million (2019: £7.0 million) for the group and £0.6 million (2019: £1.1 million) for the company.

Notes to the financial statements

18. Retirement benefit surplus (continued)

Remeasurement gains and losses are recognised directly in the statement of comprehensive income.

	Group		Company	
	2020	2019	2020	2019
	£m	£m	£m	£m
The return on plan assets, excluding amounts included in interest	(131.6)	58.5	(35.3)	11.4
Actuarial gains/(losses) arising from changes in financial assumptions	257.3	(160.6)	69.3	(39.0)
Actuarial (losses)/gains arising from changes in demographic assumptions	(7.2)	70.9	(1.9)	20.7
Actuarial gains arising from experience	36.1	104.2	9.1	11.5
Remeasurement gains on defined benefit pension schemes	154.6	73.0	41.2	4.6

For more information in relation to the group's defined benefit pension schemes see note A5.

Defined contribution schemes

During the year, the group made £22.5 million (2019: £23.0 million) of contributions and the company made £nil (2019: £nil) of contributions to defined contribution schemes which are included in employee benefit expense (see note 3).

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	Accelerated tax depreciation £m	Retirement benefit obligations £m	Other £m	Total £m
At 1 April 2018	1,049.9	58.5	(9.6)	1,098.8
Charged/(credited) to the income statement (see note 7)	26.8	11.3	(4.1)	34.0
Charged to equity (see note 7)	-	12.4	0.8	13.2
At 31 March 2019	1,076.7	82.2	(12.9)	1,146.0
Charged/(credited) to the income statement (see note 7)	13.2	22.0	(13.2)	22.0
Change in tax rate	127.5	9.7	(1.7)	135.5
Charged to equity (see note 7)	-	150.0	9.1	159.1
At 31 March 2020	1,217.4	263.9	(18.7)	1,462.6

Notes to the financial statements

19. Deferred tax liabilities (continued)

Company	Accelerated tax depreciation £m	Retirement benefit obligations £m	Other £m	Total £m
At 1 April 2018	(0.1)	13.8	(0.2)	13.5
Charged/(credited) to the income statement	-	4.1	(1.3)	2.8
Charged to equity (see note 7)	-	0.8	-	0.8
At 31 March 2019	(0.1)	18.7	(1.5)	17.1
Charged to the income statement	-	4.6	0.6	5.2
Change in tax rate	-	2.1	(0.1)	2.0
Charged to equity (see note 7)	-	35.8	-	35.8
At 31 March 2020	(0.1)	61.2	(1.0)	60.1

Certain deferred tax assets and liabilities have been offset in accordance with IAS 12 ‘Income Taxes’.

The deferred tax charge of £135.5 million (2019: £nil) for the group and £2.0 million (2019: £nil) for the company reflects the Government's reversal of the planned reduction in the rate of corporation tax from 19 per cent to 17 per cent from 1 April 2020.

20. Provisions

Group	Severance £m	Other £m	Total £m
At 1 April 2018	2.6	19.5	22.1
Charged/(credited) to the income statement	4.8	(0.3)	4.5
Utilised in the year	(4.6)	(5.2)	(9.8)
At 31 March 2019	2.8	14.0	16.8
Charged/(credited) to the income statement	7.2	(0.6)	6.6
Utilised in the year	(5.1)	(1.9)	(7.0)
At 31 March 2019	4.9	11.5	16.4

The group had no provisions classed as non-current at 31 March 2020 or 31 March 2019.

The severance provision as at 31 March 2020 and 31 March 2019 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 2020 or 31 March 2019.

Notes to the financial statements

21. Trade and other payables

		Group		Company
	2020	2019	2020	2019
	£m	£m	£m	£m
Non-current				
Deferred grants and contributions	736.8	671.2	-	-
Other creditors	24.4	26.2	-	-
Amounts owed to subsidiary undertakings	-	-	4.4	-
	761.2	697.4	4.4	-

		Group		Company
	2020	2019	2020	2019
	£m	£m	£m	£m
Current				
Trade payables	36.7	34.4	-	0.1
Amounts owed to ultimate parent undertaking	7.4	8.0	6.2	5.8
Amounts owed to subsidiary undertakings	-	-	26.4	45.8
Amounts owed to other related parties	4.8	0.6	4.5	-
Other tax and social security	5.8	5.4	-	-
Deferred grants and contributions	14.5	13.3	-	-
Accruals and other creditors	225.9	230.4	6.1	6.0
Deferred income	44.7	34.8	-	-
	339.8	326.9	43.2	57.7

The average credit period taken for trade purchases for the group is 15 days (2019: 25 days) and for the company is nil days (2019: nil days).

The carrying amounts of trade and other payables approximate their fair value.

Deferred grants and contributions

	2020	2019
	£m	£m
Group		
At the start of the year	684.5	625.8
Amounts capitalised during the year	35.1	35.7
Transfers of assets from customers	47.0	39.4
Credited to income statement – revenue	(13.8)	(12.9)
Credited to the income statement – other operating costs (see note 4)	(0.4)	(0.5)
Credited to equity – IFRS 15 opening balance adjustment	-	(2.6)
Credited to allowance for bad and doubtful receivables	(1.1)	(0.4)
At the end of the year	751.3	684.5

Notes to the financial statements

22. Other reserves

	Cumulative exchange reserve £m	Cost of hedging reserve £m	Cash flow hegding reserve £m	Total £m
At 1 April 2019	(3.7)	12.0	0.3	8.6
Other comprehensive income				
Change in fair value recognised in other comprehensive income	-	1.3	(7.6)	(6.3)
Amounts reclassified from other comprehensive income to profit or loss	-	-	5.6	5.6
Deferred tax adjustments in respect of prior years on net fair value gains	-	(2.4)	-	(2.4)
Tax on items taken directly to equity	-	(0.2)	0.4	0.2
Foreign exchange adjustments	1.3	-	-	1.3
At 31 March 2020	**(2.4)**	**10.7**	**(1.3)**	**7.0**

	Cumulative exchange reserve £m	Cost of hedging reserve £m	Cash flow hegding reserve £m	Total £m
At 31 March 2018	(1.8)	-	-	(1.8)
Adjustment on initial application of IFRS 9	(1.1)	13.8	-	12.7
At 1 April 2018	(2.9)	13.8	-	10.9
Other comprehensive income				
Change in fair value recognised in other comprehensive income	-	(2.2)	3.5	1.3
Amounts reclassified from other comprehensive income to profit or loss	-	-	(3.1)	(3.1)
Tax on items taken directly to equity	-	0.4	(0.1)	0.3
Foreign exchange adjustments	(0.8)	-	-	(0.8)
At 31 March 2019	**(3.7)**	**12.0**	**0.3**	**8.6**

On adoption of IFRS 9 on 1 April 2018, the group recognised the cost of hedging reserve as a new 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.

On adoption of IFRS 9, the group designated 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 2020, 31 March 2019 or 1 April 2018.

Notes to the financial statements

23. Share capital

	2020 number	2020 £	2019 number	2019 £
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

The group has determined that the possibility of any outflow in respect of performance guarantees issued is remote and, as such, there are no contingent liabilities to be disclosed in respect of these for the group (2019: none).

As explained further in note A6, the company has issued a guarantee in favour of United Utilities Water Limited in respect of a revolving credit facility issued by that company to the group’s joint venture, Water Plus, on which £98.0 million was outstanding at 31 March 2020. The company has recognised a liability of £4.4 million in respect of expected credit losses relating to this balance. As this is the best estimate of expected credit losses, no further contingent liability is disclosed in respect of this amount.

25. Events after the reporting period

As at the time of reporting, the developing and uncertain situation in respect of the COVID-19 pandemic continues to be closely monitored. Ofwat initiated a consultation during March 2020 aimed at identifying ways in which the non-household retail market might be supported through the current challenging situation, and this remains ongoing as at the date these financial statements were approved. The outcome of this consultation will impact both non-household retailers such as Water Plus, and wholesalers such as UUW.

On the 3rd June 2020, the group issued £300m fixed rate notes with the year of final repayment being 2031 and the coupon rate 1.875%. On the 15th June 2020, the group issued a further £75 million fixed rate notes under the same terms as the £250m fixed rate notes issued in the prior year. These notes were issued under the same terms with the year of final repayment being 2031 and coupon rate of 2.625%. On the 25 June 2020, the group issued a further £50 million fixed rate notes under the same terms as the £300m fixed rate notes issued in the current year, with the year of final repayment being 2033 and coupon rate of 2.0 per cent. These issuances have not been recorded in the financial statements at 31 March 2020 as they represent non-adjusting events after the reporting period.

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.

Notes to the financial statements - Appendices

A1. Cash generated from operations

	Group		Company	
	2020	2019	2020	2019
	£m	£m	£m	£m
Profit before tax	336.2	466.7	523.9	489.5
Adjustment for investment income (see note 5) and finance expense (see note 6)	256.0	174.9	(42.5)	(44.1)
Adjustment for share of profits of joint ventures (see note 11)	38.1	(6.7)	-	-
Operating profit	630.3	634.9	481.4	445.4
Adjustments for:				
Depreciation of property, plant and equipment (see note 9)	441.6	357.3	0.2	-
Amortisation of intangible assets (see note 10)	41.2	35.9	-	-
Loss on disposal of property, plant and equipment (see note 4)	13.9	3.9	-	-
Amortisation of deferred grants and contributions (see note 20)	(13.8)	(12.9)	-	-
Impairment of investments (see note 12)	-	-	32.5	1.6
Profit on disposal (see note 12)				
Strike off of investments	-	-	-	166.2
Non-cash dividends	-	-	-	(239.7)
Other non-cash movements	-	-	-	-
Changes in working capital:				
Decrease in inventories (see note 13)	(1.7)	1.9	-	-
(Increase)/decrease in trade and other receivables	4.6	(16.4)	(280.9)	184.4
Increase/(decrease) in trade and other payables	(44.8)	20.8	86.5	129.0
Decrease in provisions (see note 21)	(0.4)	(5.3)	-	-
Pension contributions paid less pension expense charged to operating profit	(101.6)	(57.2)	(20.6)	(23.2)
Cash generated from operations	969.3	962.9	299.1	663.7

The group has received property, plant and equipment of £47.0 million (2019: £39.4 million) in exchange for the provision of future goods and services (see notes 21 and A7).

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 overleaf. The tables overleaf should be read in conjunction with the consolidated statement of cash flows.

Notes to the financial statements - Appendices

A2. Net Debt (continued)

	Borrowings				Derivatives					
	Bonds	Bank and other term borrowings	Lease liabilities	Amounts owed to ultimate parent undertaking	In a fair value hedge	At fair value through profit or loss	**Total liabilities from financing activities**	Derivatives in a cash flow hedge	Cash and cash equivalents	**Net debt**
	£m	£m	£m	£m	£m	£m	**£m**	£m	£m	**£m**
At 31 March 2019	(5,256.5)	(2,544.6)	-	(74.1)	327.1	82.6	**(7,465.5)**	(0.5)	325.1	**(7,140.9)**
Adjustment on initial application of IFRS 16	-	-	(54.4)	-	-	-	**(54.4)**	-	-	**(54.4)**
At 1 April 2019	(5,256.5)	(2,544.6)	(54.4)	(74.1)	327.1	82.6	**(7,519.9)**	(0.5)	325.1	**(7,195.3)**
Non-cash movements										
Inflation uplift on index-linked debt	(58.2)	(42.6)	-	-	-	-	**(100.8)**	-	-	**(100.8)**
Fair value movements	(93.4)	(2.0)	-	-	57.8	(4.7)	**(42.3)**	(1.7)	-	**(44.0)**
Foreign exchange	(9.5)	(5.3)	-	-	-	-	**(14.8)**	-	-	**(14.8)**
Other	(1.5)	-	(6.5)	0.2	-	-	**(7.8)**	-	-	**(7.8)**
Cash flows used in financing activities:										
Receipts in respect of borrowings and derivatives	(651.1)	(157.1)	-	(6.1)	-	-	**(814.3)**	-	814.3	-
Payments in respect of borrowings and derivatives(1)	421.7	109.5	1.7	-	10.8	2.2	**545.9**	-	(545.9)	-
Dividends paid	-	-	-	-	-	-	-	-	(284.5)	**(284.5)**
Other	-	-	-	-	-	-	-	-	(2.8)	**(2.8)**
Changes arising from financing activities	**(392.0)**	**(97.5)**	**(4.8)**	**(5.9)**	**68.6**	**(2.5)**	**(434.1)**	**(1.7)**	**(18.9)**	**(454.7)**
Cash flows used in investing activities	-	-	-	-	-	-	-	-	(593.9)	**(593.9)**
Cash flows generated from operating activities	-	-	1.6	-	-	-	**1.6**	-	801.7	**803.3**
At 31 March 2020	**(5,648.5)**	**(2,642.1)**	**(57.6)**	**(80.0)**	**395.7**	**80.1**	**7,952.4**	**(2.2)**	**514.0**	**(7,440.6)**

Note:
(1) 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.

Notes to the financial statements - Appendices

	Borrowings			Derivatives					
	Bonds	Bank and other term borrowings	Amounts owed to ultimate parent undertaking	In a fair value hedge	At fair value through profit or loss	**Total liabilities from financing activities**	Derivatives in a cash flow hedge	Cash and cash equivalents	**Net debt**
	£m	£m	£m	£m	£m	**£m**	£m	£m	**£m**
At 31 March 2018	(5,306.6)	(2,593.1)	(62.0)	431.5	103.0	**(7,427.2)**	-	497.9	**(6,929.3)**
Adjustment on initial application of IFRS 9	-	-	-	-	0.9	**0.9**	(0.9)	-	**-**
At 1 April 2018	(5,306.6)	(2,593.1)	(62.0)	431.5	103.9	**(7,426.3)**	(0.9)	497.9	**(6,929.3)**
Non-cash movements									
Inflation uplift on index-linked debt	(58.5)	(39.8)	-	-	-	**(98.3)**	-	-	**(98.3)**
Fair value movements	(33.9)	(2.1)	-	35.5	10.4	**9.9**	0.4	-	**10.3**
Foreign exchange	(35.2)	(2.4)	-	-	-	**(37.6)**	-	-	**(37.6)**
Other	(1.3)	-	0.2	-	-	**(1.1)**	-	-	**(1.1)**
Cash flows used in financing activities:									
Receipts in respect of borrowings and derivatives	(428.1)	(107.5)	(12.3)	(1.1)	(31.7)	**(580.7)**	-	580.7	**-**
Payments in respect of borrowings and derivatives	607.1	200.3	-	(138.8)	-	**668.6**	-	(668.6)	**-**
Dividends paid	-	-	-	-	-	**-**	-	(274.5)	**(274.5)**
Changes arising from financing activities	**50.1**	**48.5**	**(12.1)**	**(104.4)**	**(21.3)**	**(39.2)**	**0.4**	**(362.4)**	**(401.2)**
Cash flows used in investing activities	-	-	-	-	-	**-**	-	(627.7)	**(627.7)**
Cash flows generated from operating activities	-	-	-	-	-	**-**	-	817.3	**817.3**
At 31 March 2019	**(5,256.5)**	**(2,544.6)**	**(74.1)**	**327.1**	**82.6**	**(7,465.5)**	**(0.5)**	**325.1**	**(7,140.9)**

Notes:
(1) 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.
(2) During the year ended 31 March 2019, a series of cross-currency interest rate derivatives in a fair value hedge relationship settled enabling repayment of foreign currency denominated bonds. The net sterling value received in respect of these derivatives £(138.8) million is shown as a negative payment reducing the overall value of 'payments in respect of borrowings and derivatives' to better reflect the net sterling cost to the company of redeeming the bonds.

Notes to the financial statements - Appendices

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:

Group	Currency	Year of final repayment	Fair value 2020 £m	Carrying value 2020 £m	Fair value 2019 £m	Carrying value 2019 £m
Borrowings in fair value hedge relationships			**2,440.0**	**2,590.5**	**2,749.3**	**2,765.8**
4.25% 500m bond	EUR	2020	-	-	449.7	441.9
5.75% 375m bond	GBP	2022	405.1	399.4	424.5	406.2
2.0% 450m bond	GBP	2025	451.8	468.5	453.1	456.7
2.867% 320m bond	HKD	2026	33.4	35.9	31.5	32.3
2.92% 739m bond	HKD	2026	77.2	83.4	72.7	74.9
1.129% 52m bond	EUR	2027	44.2	48.6	45.2	46.0
2.37% 830m bond	HKD	2027	82.7	93.3	78.7	82.0
5.625% 300m bond	GBP	2027	380.6	398.7	390.7	393.5
5.02% JPY 10bn dual currency loan	JPY/USD	2029	94.5	106.8	92.0	99.4
2.058% 30m bond	EUR	2030	26.8	30.2	26.9	27.9
1.641% 30m bond	EUR	2031	25.7	28.9	26.2	26.4
2.625% 350m bond	GBP	2031	366.4	380.5	260.0	253.0
2.9% 600m bond	HKD	2031	62.2	67.2	58.9	56.3
1.707% 28m bond	EUR	2032	23.8	28.7	24.3	26.0
1.653% 26m bond	EUR	2032	21.9	26.2	22.3	23.7
1.70% 30m bond	EUR	2033	25.3	30.8	25.8	27.9
2.0% 50m bond	GBP	2033	51.4	53.3	-	-
5.0% 200m bond	GBP	2035	267.0	310.1	266.8	291.7
Borrowings designated at fair value through profit or loss			**397.5**	**397.5**	**373.9**	**373.9**
6.875% 400m bond	USD	2028	397.5	397.5	373.9	373.9
Borrowings measured at amortised cost			**6,075.2**	**5,454.3**	**5,855.5**	**4,749.6**
Short-term bank borrowings - fixed	GBP	2020	192.2	192.2	152.0	152.0
1.61% + RPI 50m EIB IL loan	GBP	2020	68.1	67.0	68.5	65.3
1.73% + RPI 50m EIB IL loan	GBP	2020	68.1	66.9	68.5	65.2
1.84% + RPI 50m EIB IL loan	GBP	2020	68.1	66.9	68.6	65.1
1.90% + RPI 50m EIB IL loan	GBP	2020	68.1	66.8	68.6	65.1
1.93% + RPI 50m EIB IL loan	GBP	2020	68.0	66.7	68.6	65.0
1.88% + RPI 50m EIB IL loan	GBP	2020	67.9	66.6	68.4	64.9
2.10% + RPI 50m EIB IL loan	GBP	2020	67.9	66.5	68.6	64.8
2.46% + RPI 50m EIB IL loan	GBP	2020	68.2	66.6	69.0	64.9
0.80% + LIBOR 100m loan	GBP	2022	99.7	100.0	102.6	100.0
0.47% + RPI 100m IL loan	GBP	2023	121.2	118.1	121.3	115.0
0.49% + RPI 100m IL loan	GBP	2025	118.9	113.6	120.3	110.7
0.013% + RPI 25m IL bond	GBP	2025	29.1	28.3	29.9	27.6
0.1275% + RPI 100m IL loan	GBP	2026	116.2	112.1	117.5	109.2
0.01% + RPI 20m IL bond	GBP	2028	23.1	23.6	23.4	23.2
1.23% + RPI 50m EIB (amortising) IL loan	GBP	2029	43.6	40.8	48.1	44.2
0.288% + CPI 100m IL loan	GBP	2029	110.3	101.3	-	-
1.29% + RPI 50m EIB (amortising) IL loan	GBP	2029	45.9	42.8	50.5	46.1
1.12% + RPI 50m EIB (amortising) IL loan	GBP	2029	45.3	42.5	49.7	45.7
1.10% + RPI 50m EIB (amortising) IL loan	GBP	2029	45.2	42.4	49.7	45.7
0.75% + RPI 50m EIB (amortising) IL loan	GBP	2029	46.1	43.7	50.3	46.8
0.76% + RPI 50m EIB (amortising) IL loan	GBP	2030	46.0	43.5	50.3	46.6

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A3. Borrowings (continued)

	Currency	Year of final repayment	Fair value 2020 £m	Carrying value 2020 £m	Fair value 2019 £m	Carrying value 2019 £m
Borrowings measured at amortised cost (continued)						
1.15% + RPI 50m EIB (amortising) IL loan	GBP	2030	46.6	43.4	51.0	46.5
1.11% + RPI 50m EIB (amortising) IL loan	GBP	2030	46.7	43.5	51.1	46.6
0.178%+RPI 35m IL bond	GBP	2030	42.2	39.6	43.3	38.6
0.245% + CPI 20m IL bond	GBP	2031	20.7	21.4	21.2	21.0
0.01% + RPI 38m IL bond	GBP	2031	43.8	44.2	44.7	43.3
3.375% + RPI 50m IL bond	GBP	2032	105.1	81.7	126.2	79.5
0.709% + LIBOR 100m EIB (amortising) loan	GBP	2032	71.3	75.0	81.0	81.2
0.691% + LIBOR 150m EIB (amortising) loan	GBP	2032	110.4	117.2	126.0	126.6
0.573% + LIBOR 100m EIB (amortising) loan	GBP	2033	75.5	81.3	86.4	87.5
0.511% + LIBOR 150m EIB (amortising) loan	GBP	2033	117.7	126.6	133.6	135.9
2.0% 250m bond	GBP	2033	257.0	245.7	-	-
0.01% + RPI 100m EIB (amortising) IL loan	GBP	2033	100.1	98.0	106.7	102.2
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	75.0	73.4	80.0	76.6
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	75.0	75.6	82.3	78.7
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	75.0	75.6	82.3	78.7
1.9799% + RPI 100m IL bond	GBP	2035	204.0	152.7	217.8	148.6
0.873%+LIBOR 100m EIB (amortising) loan	GBP	2035	91.3	96.9	100.6	100.0
0.840%+LIBOR 75m EIB (amortising) loan	GBP	2035	69.3	75.0	75.9	75.0
0.01% + RPI 26.5m IL bond	GBP	2036	30.3	32.8	31.7	33.2
0.379% + CPI 20m IL bond	GBP	2036	20.1	21.3	21.3	21.0
0.01% + RPI 29m IL bond	GBP	2036	32.4	33.9	34.6	32.3
0.093% + CPI 60m IL bond	GBP	2037	57.3	63.6	60.6	62.5
1.66% + RPI 35m IL bond	GBP	2037	60.5	49.0	62.9	47.7
1.75% 250m bond	GBP	2038	232.1	248.0	-	-
2.40% + RPI 70m IL bond	GBP	2039	129.6	95.5	138.0	93.0
1.7829% + RPI 100m IL bond	GBP	2040	193.5	151.1	221.9	147.0
1.3258% + RPI 50m IL bond	GBP	2041	100.7	75.4	102.9	73.4
1.5802% + RPI 100m IL bond	GBP	2042	147.3	150.6	215.5	146.6
1.5366% + RPI 50m IL bond	GBP	2043	37.9	30.1	43.6	29.2
1.397% + RPI 50m IL bond	GBP	2046	94.2	75.3	109.3	73.3
0.359% + CPI 32m IL bond	GBP	2048	28.2	33.5	32.3	32.9
1.7937% + RPI 50m IL bond	GBP	2049	97.1	75.0	122.9	72.9
Commission for New Towns (amortising) loan – fixed	GBP	2053	50.7	26.8	54.6	27.4
1.847% + RPI 100m IL bond	GBP	2056	194.6	147.7	229.9	143.9
1.815% + RPI 100m IL bond	GBP	2056	188.8	147.1	228.0	143.3
1.662% + RPI 100m IL bond	GBP	2056	186.1	146.8	221.6	143.0
1.5865% + RPI 50m IL bond	GBP	2056	92.8	73.4	109.3	71.5
1.591% + RPI 25m IL bond	GBP	2056	46.3	36.6	54.6	35.6
1.556% + RPI 50m IL bond	GBP	2056	92.4	73.0	108.8	71.1
1.435% + RPI 50m IL bond	GBP	2056	90.0	72.7	106.1	70.8
1.3805% + RPI 35m IL bond	GBP	2056	62.3	50.9	73.5	49.6
1.585% + RPI 100m IL bond	GBP	2057	284.1	141.3	215.3	137.6
0.387% + CPI 33m IL bond	GBP	2057	26.7	34.2	32.3	33.6
1.702% + RPI 50m IL bond	GBP	2057	93.6	71.3	111.2	69.4
Amounts owed to ultimate parent undertaking	GBP	2020	80.0	80.0	74.1	74.1
Book overdrafts (see note 15)	GBP	2020	14.1	14.1	14.2	14.2
Lease liabilities	GBP	various	57.6	57.6	-	-
			8,912.7	**8,442.3**	**8,978.7**	**7,889.4**

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A3. Borrowings (continued)

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.

During the year, the group issued a further £100 million fixed rate notes in addition to the £250m fixed rate notes issued in the prior year. These notes were issued under the same terms with year of final repayment being 2031 and coupon rate of 2.625 per cent.

On the 3rd June 2020, the group issued £300m fixed rate notes with the year of final repayment being 2031 and the coupon rate 1.875 per cent. On the 15th June 2020, the group issued a further £75 million fixed rate notes under the same terms as the £250m fixed rate notes issued in the prior year, with the year of final repayment being 2031 and coupon rate of 2.625 per cent. On the 25 June 2020, the group issued a further £50 million fixed rate notes under the same terms as the £300m fixed rate notes issued in the current year, with the year of final repayment being 2033 and coupon rate of 2.0 per cent. These issuances have not been recorded in the financial statements at 31 March 2020 as they represent non-adjusting events after the reporting period.

The principal economic terms and conditions of outstanding borrowings, along with fair value and carrying value, were as follows:

Company	Currency	Year of final repayment	Fair value 2020 £m	Carrying value 2020 £m	Fair value 2019 £m	Carrying value 2019 £m
Borrowings measured at amortised cost						
Short-term bank borrowings – fixed	GBP	2020	120.0	120.0	100.0	100.0
Amounts owed to subsidiary undertakings	GBP	2020	555.0	555.0	540.5	540.5
Amounts owed to ultimate parent undertaking	GBP	2020	80.0	80.0	74.1	74.1
6.875% 400m bond	USD	2028	397.5	319.7	373.9	305.2
Lease liabilities	GBP	Various	3.0	3.0	-	-
			1,155.5	**1,078.2**	**1,088.5**	**1,019.8**

Borrowings are unsecured. Funding raised in currencies other than sterling is swapped to sterling to match funding costs to income and assets.

Notes to the financial statements - Appendices

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. 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.

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 2020, the group had £1,208.1 million (2019: £1,039.3 million) of available liquidity, which comprised £528.1 million (2019: £339.3 million) of cash and short-term deposits and £680.0 million (2019: £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	
	2020 £m	2019 £m	2020 £m	2019 £m
Expiring within one year	50.0	100.0	10.0	20.0
Expiring after one year but in less than two years	100.0	50.0	20.0	10.0
Expiring after more than two years	650.0	650.0	215.0	215.0
Total borrowing facilities	800.0	800.0	245.0	245.0
Facilities drawn[1]	(120.0)	(100.0)	(120.0)	(100.0)
Undrawn borrowing facilities	680.0	700.0	125.0	145.0

Note:
[1] Facilities expiring after more than two years.

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.

Notes to the financial statements - Appendices

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 on an undiscounted basis has been disclosed in note 17.

Group	Total[1] £m	Adjust-ment[2] £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2020								
Bonds	10,685.2	-	144.3	520.4	124.9	126.0	577.2	9,192.4
Bank and other term borrowings	2,894.1	-	884.1	122.0	352.1	122.7	255.8	1,157.4
Amounts owed to ultimate parent undertaking	80.0	-	80.0	-	-	-	-	-
Adjustment to carrying value[2]	(5,274.6)	(5,274.6)	-	-	-	-	-	-
Borrowings	8,384.7	(5,274.6)	1,108.4	642.4	477.0	248.7	833.0	10,349.8
Derivatives:								
Payable	952.7	-	67.4	45.7	41.8	38.2	35.4	724.2
Receivable	(1,508.6)	-	(105.7)	(90.2)	(116.9)	(82.6)	(165.3)	(947.9)
Adjustment to carrying value[2]	82.3	82.3	-	-	-	-	-	-
Derivatives – net assets	(473.6)	82.3	(38.3)	(44.5)	(75.1)	(44.4)	(129.9)	(223.7)

Group	Total[1] £m	Adjust-ment[2] £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2019								
Bonds	10,174.4	-	583.4	129.1	504.9	109.2	110.1	8,737.7
Bank and other term borrowings	3,007.5	-	292.8	680.4	125.1	356.1	125.4	1,427.7
Amounts owed to ultimate parent undertaking	74.1	-	74.1	-	-	-	-	-
Adjustment to carrying value[2]	(5,366.6)	(5,366.6)	-	-	-	-	-	-
Borrowings	7,889.4	(5,366.6)	950.3	809.5	630.0	465.3	235.5	10,165.4
Derivatives:								
Payable	1,389.0	-	510.2	43.7	36.6	32.6	30.1	735.8
Receivable	(1,825.0)	-	(607.0)	(71.5)	(70.2)	(93.8)	(64.7)	(917.8)
Adjustment to carrying value[2]	26.8	26.8	-	-	-	-	-	
Derivatives – net assets	(409.2)	26.8	(96.8)	(27.8)	(33.6)	(61.2)	(34.6)	(182.0)

Notes to the financial statements - Appendices

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 year-end 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.

Company	Total(1) £m	Adjust-ment(2) £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2020								
Bonds	176.5	-	22.1	22.1	22.1	22.1	22.1	66.0
Bank and other term borrowings	120.5	-	120.5	-	-	-	-	-
Amounts owed to ultimate parent undertaking	80.0	-	80.0	-	-	-	-	-
Amounts owed to subsidiary undertakings	555.5	-	555.5	-	-	-	-	-
Adjustment to carrying value(2)	142.7	142.7	-	-	-	-	-	-
Borrowings	1,075.2	142.7	778.1	22.1	22.1	22.1	22.1	66.0
Derivatives:								
Payable	16.1	-	16.1	-	-	-	-	-
Receivable	(15.6)	-	(15.6)	-	-	-	-	-
Adjustment to carrying value(2)	-	-	-	-	-	-	-	-
Derivatives – net liabilities	0.5	-	0.5	-	-	-	-	-

Company	Total(1) £m	Adjust-ment(2) £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	than 5 years £m
At 31 March 2019								
Bonds	465.7	-	20.9	20.6	20.4	20.2	20.0	363.6
Bank and other term borrowings	100.2	-	100.2	-	-	-	-	-
Amounts owed to ultimate parent undertaking	74.1	-	74.1	-	-	-	-	-
Amounts owed to subsidiary undertakings	540.5	-	540.5	-	-	-	-	-
Adjustment to carrying value(2)	(160.7)	(160.7)	-	-	-	-	-	-
Borrowings	1,019.8	(160.7)	735.7	20.6	20.4	20.2	20.0	363.6
Derivatives:								
Payable	33.7	-	33.7	-	-	-	-	-
Receivable	(34.3)	-	(34.3)	-	-	-	-	-
Adjustment to carrying value(2)	0.1	0.1	-	-	-	-	-	-
Derivatives – net assets	(0.5)	0.1	(0.6)	-	-	-	-	-

Notes:

(1) Forecast future cash flows are calculated, where applicable, using forward interest rates based on the interest environment at year-end 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.

Notes to the financial statements - Appendices

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 have been made to the payment terms set out within the market codes. These changes provide the option for extended credit terms for retailers. As at 31 March 2020, Water Plus was the group's single largest debtor, with amounts outstanding in relation to wholesale services of £52.7 million (2019: £39.1 million). During the year, sales to Water Plus in relation to wholesale services were £438.3 million (2019: £454.8 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 2020 and 31 March 2019, 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:

	Group		Company	
	2020	2019	2020	2019
	£m	£m	£m	£m
Cash and short-term deposits (see note 15)	528.1	339.3	25.0	12.1
Trade and other receivables (see note 14)	2,107.0	2,128.4	3,452.6	3,174.4
Investments (see note 12)	0.1	11.5	-	-
Derivative financial instruments	617.9	489.1	-	0.7
	3,253.1	2,968.3	3,477.6	3,187.2

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A4. Financial risk management (continued)

Credit risk (continued)

Included within trade and other receivables for the group are amounts owed by the ultimate parent undertaking of £1,764.1 million (2019: £1,730.8 million), and £95.0 million (2019: £143.5 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 2020 the group held £72.2 million (2019: £52.0 million) and the company held £nil (2019: £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. In the year to 31 March 2020, the group's regulatory assets were linked to RPI inflation; however, for the 2020–25 regulatory period, from 1 April 2020 the group's RCV will be 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 expected to remain weighted towards RPl-linked form until CPI and/or CPIH debt and swaps become available in sufficient size at an economic cost. 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 issuing of CPI index-linked debt since 2017 and the swapping of both nominal and RPI-linked debt to CPI since 2018. 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 £4,082.2 million at 31 March 2020 (2019: £3,775.8 million).

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 described above.

Group	2020 £m	2019 £m
Increase/(decrease) in profit before tax and equity		
1 per cent increase in RPI/CPI	(39.6)	(38.2)
1 per cent decrease in RPI/CPI	39.6	38.2

Notes to the financial statements - Appendices

A4. Financial risk management (continued)

Inflation risk (continued)

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 2020 or 31 March 2019.

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. Therefore, 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.

This interest rate hedging policy dovetails with our revised 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.

Notes to the financial statements - Appendices

A4. Financial risk management (continued)

Interest rate risk (continued)

	Group		Company	
	2020	2019	2020	2019
	£m	£m	£m	£m
Increase/(decrease) in profit before tax and equity				
1 per cent increase in interest rate	121.9	129.4	(2.2)	(7.3)
1 per cent decrease in interest rate	(130.2)	(140.5)	2.2	7.3

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:

	1 year or less	1 to 2 years	2 to 5 years	Over 5 years
Notional principal amount £m	-	375.0	450.0	900.0
Average contracted fixed interest rate %	-	1.98	1.36	2.49

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	1,725.0
Carrying amount of hedging instruments	285.6
Accumulated fair value (gains)/losses on hedged items	287.4
Fair value (gains)/losses used for calculating hedge ineffectiveness for the year ended 31 March 2020[(1)]:	
Hedged items	50.6
Hedging instrument	(50.1)
Hedge ineffectiveness recognised in the income statement	0.5
Nominal amount of hedging instruments directly impacted by the IBOR reform	1,675.0

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.

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.

Notes to the financial statements - Appendices

A4. Financial risk management (continued)

Currency risk (continued)

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	-	-	-	442.8
Average contracted fixed interest rate %	-	-	-	2.46

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	442.8
Carrying amount of hedging instruments	125.8
Accumulated fair value (gains)/losses on hedged items	132.8
Fair value (gains)/losses used for calculating hedge ineffectiveness for the year ended 31 March 2020(1):	
Hedged items	36.5
Hedging instrument	(35.6)
Hedge ineffectiveness recognised in the income statement	1.0
Nominal amount of hedging instruments directly impacted by the IBOR reform	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 rate such as the Sterling Overnight Index Average (SONIA). The IASB have amended IFRS 9 'Financial Instruments', providing temporary exceptions from applying specific hedge accounting requirements in cases where hedging relationships are directly impacted by the IBOR reform. The temporary exception allows the group to assume that the economic relationship between the hedged debt and hedging derivatives remains in place, despite the uncertainties around this process. Uncertainties include whether market wide mechanisms will be available to replace references to IBORs with relevant alternative reference rates plus a spread adjustment (e.g. the expected ISDA protocol for derivatives) or whether bilateral amendments to financial instruments will need to be negotiated with each counterparty, the timing of when the IBORs will be replaced with alternative benchmark rates and how and when the spread adjustment between the IBORs and the alternative rate will be determined. This exception will be applied until the uncertainty surrounding the IBOR reform has ended, and we have judged that this uncertainty remains in place at 31 March 2020.

The London Inter-bank Offered Rate (LIBOR) is the interest rate benchmark to which the group’s hedging relationships are significantly exposed. The majority of fair value hedging relationships, mitigating interest rate risk and/or currency risk, are directly affected by the reform. The amount of debt held as hedged items in these relationships is £1,675 million of fixed rate debt and £443 million of cross currency fixed rate debt. Further detail on how the group manages these risks can be found in the interest rate risk sections of this note.

Notes to the financial statements - Appendices

A4. Financial risk management (continued)

Interest rate benchmark reform (continued)

In calculating the fair value attributable to the hedged risk for the fixed rate debt, the group has assumed that once the hedging instruments transition to the alternative risk-free rate, the alternative risk-free rate plus spread will be economically equivalent to the pretransition LIBOR currently included in the hedging instruments, and no other changes to the terms of the hedging instrument will occur.

A transition project is being undertaken to manage and respond to all aspects of IBOR reform across the business. This will encompass:

- the amendment of existing financial instrument contracts that reference IBORs, including swaps, European Investment Bank floating rate debt, bilateral loan agreements, intercompany borrowings and committed lending facilities
- the adoption of alternative reference rates for new financial instruments;
- the accounting impact, covering the amendment of hedge documentation, enhanced disclosure requirements and the valuation of financial instruments; and
- ensuring appropriate system capabilities are developed and implemented.

The group proactively monitors market developments and announcements relating to IBOR reform, and will seek to ensure that the risk of the group being economically disadvantaged by the proposed changes is minimised by ensuring that appropriate actions are taken on a timely basis. During the year ending 31 March 2020, the group has entered into a number of financial instruments that reference alternative reference rates (SONIA).

The IASB published an exposure draft relating to phase 2 of the proposed IFRS Standards amendments in April 2020. These proposed amendments aim to address issues affecting financial statements when changes are made to contractual cash flows and hedging relationships as a result of the reform. The group is actively considering the amendments proposed.

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.

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A4. Financial risk management (continued)

Group	Total £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2020							
Borrowings in fair value hedge relationships							
Fixed rate instruments	2,590.5	-	399.4	-	-	468.5	1,722.6
Effect of swaps	-	2,590.5	(399.4)	-	-	(468.5)	(1,722.6)
	2,590.5	2,590.5	-	-	-	-	-
Borrowings designated at fair value through profit or loss							
Fixed rate instruments	397.5	-	-	-	-	-	397.5
Effect of swaps	-	397.5	-	-	-	-	(397.5)
	397.5	397.5	-	-	-	-	-
Borrowings measured at amortised cost							
Fixed rate instruments	770.3	193.2	1.0	1.1	0.7	0.8	573.5
Floating rate instruments	686.1	686.1	-	-	-	-	-
Index-linked instruments	3,917.9	3,917.9	-	-	-	-	-
	5,374.3	4,797.2	1.0	1.1	0.7	0.8	573.5
Effect of fixed interest rate swaps	-	(2,382.3)	50.0	164.5	575.0	350.0	1,242.8
Total external borrowings	8,362.3	5,402.9	51.0	165.6	575.7	350.8	1,816.3
Amounts owed to ultimate parent undertaking	80.0	80.0	-	-	-	-	-
Total borrowings	**8,442.3**	**5,482.9**	**51.0**	**165.6**	**575.7**	**350.8**	**1,816.3**
Cash and short-term deposits	(528.1)	(528.1)	-	-	-	-	-
Net borrowings	7,914.2	4,954.8	51.0	165.6	575.7	350.8	1,816.3

Group	Total £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2019							
Borrowings in fair value hedge relationships							
Fixed rate instruments	2,765.8	441.9	-	406.2	-	-	1,917.7
Effect of swaps	-	2,323.9	-	(406.2)	-	-	(1,917.7)
	2,765.8	2,765.8	-	-	-	-	-
Borrowings designated at fair value through profit or loss							
Fixed rate instruments	373.9	-	-	-	-	-	373.9
Effect of swaps	-	373.9	-	-	-	-	(373.9)
	373.9	373.9	-	-	-	-	-
Borrowings measured at amortised cost							
Fixed rate instruments	179.4	152.6	0.6	0.7	0.7	0.7	24.1
Floating rate instruments	720.4	720.4	-	-	-	-	-
Index-linked instruments	3,775.8	3,775.8	-	-	-	-	-
	4,675.6	4,648.8	0.6	0.7	0.7	0.7	24.1
Effect of fixed interest rate swaps	-	(2,330.9)	148.5	50.0	164.5	575.0	1,392.9
Total external borrowings	7,815.3	5,457.6	149.1	50.7	165.2	575.7	1,417.0
Amounts owed to ultimate parent undertaking	74.1	74.1	-	-	-	-	-
Total borrowings	**7,889.4**	**5,531.7**	**149.1**	**50.7**	**165.2**	**575.7**	**1,417.0**
Cash and short-term deposits	(339.3)	(339.3)	-	-	-	-	-
Net borrowings	7,550.1	5,192.4	149.1	50.7	165.2	575.7	1,417.0

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A4. Financial risk management (continued)

Company	Total £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2020							
Borrowings measured at amortised cost							
Fixed rate instruments	442.7	120.0	-	-	-	-	322.7
	442.7	120.0	-	-	-	-	322.7
Total external borrowings	442.7	120.0	-	-	-	-	322.7
Amounts owed to subsidiary undertakings	555.5	555.5	-	-	-	-	-
Amounts owed to ultimate parent undertaking	80.0	80.0	-	-	-	-	-
Total borrowings	1,078.2	755.5	-	-	-	-	322.7
Cash and short-term deposits	(25.0)	(25.0)	-	-	-	-	-
Net borrowings	1,053.2	730.5	-	-	-	-	322.7

Company	Total £m	1 year or less £m	1-2 years £m	2-3 years £m	3-4 years £m	4-5 years £m	More than 5 years £m
At 31 March 2019							
Borrowings in fair value hedge relationships							
Fixed rate instruments	-	-	-	-	-	-	-
Effect of swaps	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
Borrowings measured at amortised cost							
Fixed rate instruments	405.2	100.0	-	-	-	-	305.2
	405.2	100.0	-	-	-	-	305.2
Total external borrowings	-	-	-	-	-	-	-
Amounts owed to subsidiary undertakings	540.5	540.5	-	-	-	-	-
Amounts owed to ultimate parent undertaking	74.1	74.1	-	-	-	-	-
Total borrowings	1,019.8	714.6	-	-	-	-	305.2
Cash and short-term deposits	(12.1)	(12.1)	-	-	-	-	-
Net borrowings	1,007.7	702.5	-	-	-	-	305.2

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A4. Financial risk management (continued)

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.

Details of electricity swaps that have been designated in cash flow hedging relationships are summarised below:

Risk exposure	**Electricity price risk**
Nominal amount of hedging instruments	44.9
Carrying amount of hedging instruments	(2.2)
Fair value (gains)/losses used for calculating hedge ineffectiveness for the year ended 31 March 2020[1]:	2.0
Hedge ineffectiveness recognised in the income statement	-
Cash flow hedge reserve	1.3
Amount reclassified from the cash flow hedge reserve to the income statement	5.6

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.

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 2020, RCV gearing was within the range at 63 per cent (2019: 61 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.

In order 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) and Funds from Operations (FFO) to debt) 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.

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A4. Financial risk management (continued)

Capital risk management (continued)

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.

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 **2020**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value through profit or loss				
Derivative financial assets – fair value hedge	-	395.7	-	395.7
Derivative financial assets – held for trading[1]	-	222.0	-	222.0
Derivative financial assets – cash flow hedge[2]	-	0.2	-	0.2
Investments[3]	-	0.1	-	0.1
Financial liabilities at fair value through profit or loss				
Derivative financial liabilities – fair value hedge	-	-	-	-
Derivative financial liabilities – held for trading[1]	-	(141.9)	-	(141.9)
Derivative financial assets – cash flow hedge[2]	-	(2.4)	-	(2.4)
Financial liabilities designated as fair value through profit or loss	-	(397.5)	-	(397.5)
Financial instruments for which fair value has been disclosed				
Financial liabilities in fair value hedge relationships	(1,981.5)	(458.5)	-	(2,440.0)
Other financial liabilities at amortised cost	(199.9)	(5,875.3)	-	(6,075.2)
	(2,181.4)	**(6,257.6)**	**-**	**(8,439.0)**

Group **2019**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value through profit or loss				
Derivative financial assets – fair value hedge	-	329.4	-	329.4
Derivative financial assets – held for trading[1]	-	158.5	-	158.5
Derivative financial assets – cash flow hedge	-	1.2	-	1.2
Investments	-	11.5	-	11.5
Financial liabilities at fair value through profit or loss				
Derivative financial liabilities – fair value hedge	-	(2.3)	-	(2.3)
Derivative financial liabilities – held for trading[1]	-	(75.9)	-	(75.9)
Derivative financial assets – cash flow hedge	-	(1.7)	-	(1.7)
Financial liabilities designated as fair value through profit or loss	-	(373.9)	-	(373.9)
Financial instruments for which fair value has been disclosed				
Financial liabilities in fair value hedge relationships	(2,316.9)	(432.4)	-	(2,749.3)
Other financial liabilities at amortised cost	(680.9)	(5,174.6)	-	(5,855.5)
	(2,997.8)	**(5,560.2)**	**-**	**(8,558.0)**

Note:

(1) 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 £221.9 million (2019: £151.3 million).

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A4. Financial risk management (continued)

Fair values (continued)

- 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).

Company	Level 1	Level 2	Level 3	Total
2020	£m	£m	£m	£m
Financial assets at fair value through profit or loss				
Derivative financial assets – held for trading[1] [2]	-	-	-	-
Financial liabilities at fair value through profit or loss				
Derivative financial liabilities – held for trading[1]	-	(0.5)	-	(0.5)
Financial instruments for which fair value has been disclosed				
Financial liabilities in fair value hedge relationships	-	-	-	-
Other financial liabilities at amortised cost	-	(1,155.5)	-	(1,155.5)
	-	**(1,156.0)**	**-**	**(1,156.0)**

Company	Level 1	Level 2	Level 3	Total
2019	£m	£m	£m	£m
Financial assets at fair value through profit or loss				
Derivative financial assets – held for trading[1] [2]	-	0.7	-	0.7
Financial liabilities at fair value through profit or loss				
Derivative financial liabilities – held for trading[1]	-	(0.2)	-	(0.2)
Financial instruments for which fair value has been disclosed				
Financial liabilities in fair value hedge relationships	-	-	-	-
Other financial liabilities at amortised cost	-	(1,088.5)	-	(1,088.5)
	-	**(1,088.0)**	**-**	**(1,088.0)**

Notes:

(1) These derivatives form economic hedges and, as such, management intends to hold these through to maturity.
(2) Includes £nil amounts owed by subsidiary undertakings (2019: £0.2 million).

The group has calculated fair values using quoted prices where an active market exists, which has resulted in £2,181.4 million (2019: £2,997.8 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 £816.4 million decrease (2019: £1,620.2 million decrease) in ‘level 1’ fair value measurements is largely due to a decrease in the number of observable quoted bond prices in active markets at 31 March 2020.

During the year, changes in the fair value of financial liabilities designated at fair value through profit or loss resulted in a £23.6 million gain (2019: £26.2 million loss). Included within this was a £34.2 million gain (2019: £6.6 million gain) attributable to changes in own credit risk, recognised in other comprehensive income. The cumulative amount due to changes in credit spread was £79.0 million profit (2019: £44.8 million profit). The carrying amount is £171.4 million (2019: £147.8 million) higher than the amount contracted to settle on maturity.

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A5. Retirement benefits

Defined benefit schemes

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), both of which are closed to new 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. The trustees are required by law to act in the interests of all relevant beneficiaries and are responsible for the investment policy with regard to the assets plus the day-to-day administration of the benefits.

The Principal Employer for both the UUPS and ESPS is United Utilities PLC (UUPLC), with UUW being a Participating Employer. For accounting purposes the assets and liabilities for both schemes are split between UUW and United Utilities PLC based on information stemming from the results of the funding valuations for the schemes as at 31 March 2013 for both UUPS and ESPS, which has been updated based on the results of the funding valuation as at 31 March 2018 and rolled forward to 31 March 2020 based on an approximation of changes in the status of scheme members. Percentage splits between the two companies in terms of defined benefit contributions has remained stable since the 2013 funding valuations and therefore are deemed relevant for the year ended 31 March 2020.

During April 2018, the majority of active members in the defined benefit sections of the UUPS transitioned to a hybrid section comprising both defined benefit and defined contribution elements. Pension benefits relating to pensionable service before 1 April 2018 were unaffected by the changes. This transition was a consequence of an increase in future service costs and was intended to reduce the overall costs and risk to the group while balancing the interests of employees by maintaining an element of defined benefit pension provision.

The group operates a series of historic unfunded, unregistered retirement benefit schemes. The costs of these schemes are included in the total pension cost, on a basis consistent with IAS 19 'Employee Benefits' and the assumptions set out below.

Under the schemes, employees are entitled to annual pensions on retirement. Benefits are also payable on death and following other events such as withdrawing from active service. No other post-retirement benefits are provided to these employees.

The defined benefit obligation includes benefits for current employees, former employees and current pensioners as analysed in the table below:

		Group		**Company**
	2020	2019	2020	2019
	£m	£m	£m	£m
Total value of current employees benefits	665.6	754.3	55.2	55.3
Deferred members benefits	521.9	651.4	228.2	279.4
Pensioner members benefits	1,870.1	2,019.5	517.7	558.7
Total defined benefit obligation	3,057.6	3,425.2	801.1	893.4

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 requirements

The latest finalised funding valuations of the schemes were carried out by independent qualified actuaries as at 31 March 2018, earlier than originally planned due to the aforementioned changes to the pension scheme, and determined that the schemes were both in a deficit position on a funding basis. The basis on which scheme liabilities are valued for funding purposes differs from the basis required under IAS 19, with liabilities on a funding basis being subject to assumptions at the valuation date that are not updated

Notes to the financial statements - Appendices

A5. Retirement benefits (continued)

Funding requirements (continued)

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 at both 31 March 2020 and 31 March 2019 as, under both the UUPS and ESPS scheme rules, the group has an unconditional right to a refund of the surplus assuming the full settlement of the plans' liabilities in a single event, such as a scheme wind-up.

Under UK legislation there is a requirement that pension schemes are funded prudently, and that funding plans are agreed by pension scheme trustees. The group had plans in place with the schemes' trustees to address the funding deficits by 31 December 2021 for the UUPS and 30 September 2024 for the ESPS, through a series of deficit recovery contributions. This timescale has been accelerated, with accelerated deficit repair contributions of £97.6 million and £5.4 million made to the UUPS and ESPS respectively in April 2019. These payments represent the final acceleration of deficit repair contributions set out in the schedules of contributions agreed with the schemes' trustees as part of the 31 March 2018 valuation process, and reduce the deficit repair contributions payable, due from the company, to £nil.

As the 2018 valuation basis was consistent with a long-term target for self-sufficiency, the expectation is that the pension schemes will be fully funded on a low dependency basis without additional contributions from the company.

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.

In addition, in the year ended 31 March 2020, the investment and risk management strategy continued to evolve with both UUPS and ESPS now fully hedging inflation exposure through external market swaps and gilts. Further details of the derivatives used in reducing investment risk are disclosed in the 'Further reporting analysis' section of this appendix.

The group expects to make further contributions of £7.7 million in the year ending 31 March 2021, £6.4 million and £0.9 million in respect of current service contributions to UUPS and ESPS respectively, and £0.4 million in respect of expenses to the ESPS.

The schemes' funding plans are reviewed regularly, and the next funding valuation for UUPS and ESPS is due no later than 31 March 2021.

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 by 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 the forecast RPI and CPI. Both UUPS and ESPS are now fully hedging inflation exposure along with underlying interest rates through external market swaps and gilts, the value of which is included in the schemes' assets.

Consequently, the reported statement of financial position under IAS 19 remains volatile due to changes in credit spread which have not been hedged, primarily due to the difficulties in doing so over long durations, and changes in mortality as management has decided, at the current time, not to hedge this exposure due to its lower volatility in the short term and the relatively high hedging costs.

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A5. Retirement benefits (continued)

Impact of scheme risk management on IAS 19 disclosures (continued)

In contrast, the schemes' specific funding bases, which formed the basis for regular deficit repair contributions, are unlikely to suffer from significant volatility due to credit spread, because a prudent, fixed credit spread assumption is applied.

Pension benefits under the defined benefit element of the new UUPS hybrid section, that became effective for pensionable service from 1 April 2018, are linked to CPI rather than RPI.

In the year ended 31 March 2020, the discount rate decreased by 0.1 per cent (2019: 0.2 per cent decrease), which includes a 0.7 per cent increase in credit spreads and a 0.8 per cent decrease in gilt yields over the year. The IAS 19 remeasurement gain of £154.6 million (2019: £73.0 million) reported in note 18 has largely resulted from an increase in credit spreads during the year. The impact of movements in credit spreads is less pronounced on a scheme funding basis compared with the remeasurement gain recognised on an IAS 19 accounting basis as the discount rate used for valuing obligations utilises a fixed credit spread assumption.

Guaranteed Minimum Pensions (GMP) equalisation

On 26 October 2018, the High Court issued its ruling in a landmark case involving Lloyds Banking Group on GMP. The implication of the ruling is that GMP will be equalised for males and females. The impact of GMP equalisation under the chosen C2 method of calculation is £5.5 million (0.2 per cent of liability) for the UUPS and £1.1 million (0.3 per cent of liability) for the ESPS, resulting in an overall increase in the pension liability of £6.6 million as a result of additional benefits being recognised, with a corresponding amount recorded in past service costs in the income statement. Any future true-up costs will be accounted for in other comprehensive income as a change in management estimate.

Reporting and assumptions

The results of the latest funding valuations at 31 March 2018 have been adjusted for IAS 19 in order to assess the position at 31 March 2020, by taking 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 2018 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:

	2020	2019
Group and Company	% p.a.	% p.a.
Discount rate	2.30	2.40
Pension increases	2.80	3.45
Pensionable salary growth:		
ESPS	2.80	3.45
UUPS	1.60	2.05
Price inflation - RPI	2.80	3.45
Price inflation - CPI	1.60	2.05

The discount rate is consistent with a high-quality corporate bond rate, with 2.30 per cent being equivalent to gilts plus 160 basis points (31 March 2019: 2.40 per cent being equivalent to gilts plus 90 basis points).

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A5. Retirement benefits (continued)

In September 2019, the Chancellor of the Exchequer highlighted the UK Statistics Authority's proposals to change RPI to align with CPIH (Consumer Pricing Index, including housing costs). The Chancellor commented that any change would not be made before 2025 and possibly not until 2030. At the March 2020 budget, the Chancellor launched a public consultation on these proposals which is due to close in August 2020. To provide an indication of the differential between RPI and CPIH, broadly CPIH increases are expected to average around 1 per cent p.a. below RPI in the long-term (about the same as CPI), so this change could have a significant impact on many pension schemes. A reduction in RPI will result in a reduction to pension scheme liabilities; however, as our pension schemes are hedged for RPI inflation this will also result in a comparable reduction to pension scheme assets.

Demographic assumptions

At both 31 March 2020 and 31 March 2019, mortality in retirement is assumed to be in line with the Continuous Mortality Investigation's (CMI) S2PA year of birth tables, with a scaling factor of 106 per cent and 109 per cent for male pensioners and non-pensioners respectively and 104 per cent and 105 per cent for female pensioners and non-pensioners respectively, reflecting actual mortality experience. At 31 March 2020, mortality in retirement is based on CMI 2019 (2019: CMI 2018) long-term improvement factors, with a long-term annual rate of improvement of 1.50 per cent (2019: 1.50 per cent). The current life expectancies at age 60 underlying the value of the accrued liabilities for the schemes are:

Group and Company	2020 years	2019 years
Retired member - male	26.6	26.4
Non-retired member - male	27.7	27.5
Retired member - female	28.9	28.6
Non-retired member - female	30.2	30.0

Sensitivity of the key scheme assumptions

The measurement of the group's defined benefit surplus is sensitive to changes in key assumptions, which are described above. The sensitivity calculations presented below 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.

- ***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 £132.8 million (2019: £73.2 million, based on an increase/decrease of 0.1 per cent) decrease/increase in the schemes' liabilities at 31 March 2020, 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.

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A5. Retirement benefits (continued)

Sensitivity of the key scheme assumptions (continued)

- ***Price inflation***

An increase/decrease in the inflation assumption of 0.25 per cent would have resulted in a £124.5 million (2019: £68.4 million, based on an increase/decrease of 0.1 per cent) increase/decrease in the schemes' liabilities at 31 March 2020, 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 2020, 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.

- ***Mortality long-term improvement rate***

An increase in the mortality long-term improvement rate to 1.75 per cent would have resulted in a £31.1 million decrease in the schemes' liabilities at 31 March 2020.

- ***Life expectancy***

An increase/decrease in life expectancy of one year would have resulted in a £116.6 million (2019: £137.1 million) increase/decrease in the schemes' liabilities at 31 March 2020. 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.

Further reporting analysis

At 31 March, the fair value of the schemes' assets recognised in the statement of financial position were as follows:

Group	Schemes' assets %	2020 £m	Schemes' assets %	2019 £m
Equities	-	-	-	0.8
Non-equity growth assets	9.3	356.4	7.7	302.5
Gilts	47.1	1,795.8	33.5	1,310.2
Bonds	48.0	1,828.1	46.2	1,805.8
Other	(4.4)	(168.6)	12.6	489.8
Total fair value of schemes' assets	100.0	3,811.7	100.0	3,909.1
Present value of defined benefit obligations		(3,057.6)		(3,425.2)
Net retirement benefit surplus		754.1		483.9

The fair values in the table above are all based on quoted prices in an active market or observable inputs, with the exception of £232.1 million (2019: £203.8 million) of assets included in 'Other', which fall within the 'Level 3' fair value categorisation in accordance with IFRS 13 'Fair Value Measurement'. The fair value of these assets has been estimated based on the latest available observable prices, updated with reference to movements in comparable observable indices to the reporting date, and adjusted for judgements to reflect differences in the liquidity and credit components of the asset pricing. Judgement is required in estimating the fair value of these assets, with the values estimated to fall within a range of £219 million and £245 million.

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A5. Retirement benefits (continued)

Further reporting analysis (continued)

Company	Schemes' assets %	2020 £m	Schemes' assets %	2019 £m
Equities	-	-	-	0.1
Non-equity growth assets	9.0	88.3	8.0	80.7
Gilts	43.8	427.1	34.2	342.9
Bonds	48.4	472.7	46.5	466.8
Other	(1.2)	(12.0)	11.3	113.0
Total fair value of schemes' assets		976.1	100.0	1,003.5
Present value of defined benefit obligations		(801.1)		(893.4)
Net retirement benefit surplus		175.0		110.1

The fair values in the table above are all based on quoted prices in an active market, with the exception of £39.9 million (2019: £35.1 million) of assets included in 'Other', which fall within the 'Level 3' fair value categorisation in accordance with IFRS 13 'Fair Value Measurement'. The fair value of these assets has been estimated based on the latest available observable prices, updated with reference to movements in comparable observable indices to the reporting date, and adjusted for judgements to reflect differences in the liquidity and credit components of the asset pricing. Judgement is required in estimating the fair value of these assets, with the values estimated to fall within a range of £38 million and £42 million.

The assets, in respect of UUPS, included in the table above, have been allocated to each asset class based on the return the assets are expected to achieve as UUPS has entered into a variety of derivative transactions to change the return characteristics of the physical assets held in order to reduce undesirable market and liability risks. As such, the breakdown shown 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, as described above. The collateral portfolio, comprising cash and eligible securities readily convertible to cash, provides sufficient liquidity to manage the derivative transactions and is expected to achieve a return in excess of LIBOR.

The fair value derivatives included within pension scheme asset classification are analysed as follows:

	Group			**Company**		
At 31 March 2020	Underlying assets £m	Fair value of Derivatives £m	Combined £m	Underlying assets £m	Fair value of Derivatives £m	Combined £m
Equities	-	-	-	-	-	-
Non-equity growth assets	356.4	-	356.4	88.3	-	88.3
Gilts	1,795.8	-	1,795.8	427.1	-	427.1
Bonds	1,865.0	(36.9)	1,828.1	485.2	(12.5)	472.7
Other	330.0	(498.6)	(168.6)	82.6	(94.6)	(12.0)
Total fair value of schemes' assets	**4,347.2**	**(535.5)**	**3,811.7**	**1,083.2**	**(107.1)**	**976.1**

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A5. Retirement benefits (continued)

Further reporting analysis (continued)

At 31 March 2019	Group Underlying assets £m	Group Fair value of Derivatives £m	Group Combined £m	Company Underlying assets £m	Company Fair value of Derivatives £m	Company Combined £m
Equities	4.8	(4.0)	0.8	0.8	(0.7)	0.1
Other non-equity growth assets	302.5	-	302.5	80.7	-	80.7
Gilts	1,310.2	-	1,310.2	342.9	-	342.9
Bonds	1,821.0	(15.2)	1,805.8	468.1	(1.3)	466.8
Other	370.0	119.8	489.8	87.6	25.4	113.0
Total fair value of schemes' assets	**3,808.5**	**100.6**	**3,909.1**	**980.1**	**23.4**	**1,003.5**

The derivative values in the tables above represent the net market value of derivatives held within each of these asset categories as follows:

- In the prior year, derivatives were held within the UUPS equity portfolio to gain economic exposure equivalent to around 4.0 per cent of that scheme's assets, and comprised of currency forwards with a value of £(4.0) million for the group and £(0.7) million for the company;

- Derivatives are used within both the UUPS and ESPS bond portfolio to hedge non-sterling exposure back to sterling:
  - the UUPS total value of £(27.7) million (2019: £(17.1) million) for the group and £(4.8) million (2019: £(2.9) million) for the company, comprises interest rate swaps with a value of £nil (2019: £(15.0) million) for the group and £nil (2019: (2.6) million) for the company and currency forwards with a value of £(27.7) million (2019: £(2.1) million) for the group and £(4.8) million (2019: £(0.3) million) for the company; and
  - the ESPS total value of £(9.2) million (2019: £1.9 million) for the group and £(7.7) million (2019: £1.6 million) for the company relates to interest rate swaps.

  Derivatives are used within both the UUPS and ESPS 'other' portfolios to manage liability risks. Both schemes use a range of derivatives to target a high level of interest rate and inflation hedging, comprising £(485.4) million (2019: £112.7 million) for the group and £(83.5) million (2019: £19.4 million) for the company in the UUPS and £(13.2) million (2019: £7.1 million) for the group and £(11.1) million (2019: £6.0 million) for the company in the ESPS. These are further broken down as: follows:

  - the UUPS net value of £(485.4) million (2019: £112.7 million) for the group and £(83.5) million (2019: £19.4 million) for the company comprise asset swaps with a value of £(30.2) million (2019: £(32.7) million) for the group and £(5.2) million (2019: £(5.6) million) for the company, interest rate swaps with a value of £25.7 million (2019: £143.6 million) for the group and £4.4 million (2019: £24.7 million) for the company, gilt repurchase agreements with a value of £(405.9) million (2019: £nil) for the group and £(69.8) million (2019: £nil) for the company and RPI inflation swaps with a value of £(75.0) million (2019: £1.8 million) for the group and £(12.9) million (2019: £0.3 million) for the company; and

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A5. Retirement benefits (continued)

Further reporting analysis (continued)

- the ESPS net value of £(13.2) million (2019: £7.1 million) for the group and £(11.1) million (2019: £6.0 million) for the company represents gilt repurchase agreements with a value of £(1.2) million (2019: £7.4 million) for the group and £(1.0) million (2019: £6.2 million) for the company and RPI inflation swaps with a value of £(10.6) million (2019: £(0.3) million) for the group and £(8.9) million (2019: £(0.2) million) for the company, interest rate swaps with a value of £(0.4) million for the group and £(0.3) million for the company and total return swaps with a value of £(1.0) million for the group and £(0.9) million for the company.

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, as these are not held expressly for the purpose of managing risk. The total fair value of pooled funds held within the schemes' assets was £698.3 million (2019: £628.1 million) for the group and £166.4 million (2019: £153.7 million) for the company.

The intention is that the schemes' assets provide a 100 per cent interest rate hedge and a 100 per cent inflation risk hedge 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.

Movements in the fair value of the schemes' assets were as follows:

		Group		**Company**
	2020 £m	2019 £m	2020 £m	2019 £m
At the start of the year	3,909.1	3,842.9	1,003.5	978.5
Interest income on schemes' assets	94.3	98.4	24.1	25.0
The return on plan assets, excluding amounts included in interest	(131.6)	58.5	(35.3)	11.4
Member contributions	2.6	2.9	0.1	0.4
Benefits paid	(175.0)	(166.0)	(38.4)	(37.2)
Administrative expenses	(1.6)	(2.8)	(0.6)	(1.0)
Company contributions	113.9	75.2	22.7	26.4
At the end of the year	3,811.7	3,909.1	976.1	1,003.5

The actual return on the schemes' assets was a loss of £37.3 million (2019: £156.9 million gain) for the group and a loss of £11.2 million (2019: £36.4 million gain) for the company, principally due to losses on derivatives hedging the schemes' liabilities.

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A5. Retirement benefits (continued)

Further reporting analysis (continued)

Movements in the present value of the defined benefit obligations are as follows:

	Group		Company	
	2020 £m	2019 £m	2020 £m	2019 £m
At the start of the year	(3,425.2)	(3,498.7)	(893.4)	(898.4)
Interest cost on schemes' obligations	(80.3)	(88.9)	(21.0)	(22.8)
Actuarial gains/(losses) arising from changes in financial assumptions	257.3	(160.6)	69.3	(39.0)
Actuarial (losses)/gains arising from changes in demographic assumptions	(7.2)	70.9	(1.9)	20.7
Actuarial gains arising from experience	36.1	104.2	9.1	11.5
Curtailments/settlements	(4.6)	(9.0)	(1.0)	(1.1)
Member contributions	(2.6)	(2.9)	(0.1)	(0.4)
Benefits paid	175.0	166.0	38.4	37.2
Current service cost	(6.1)	(6.2)	(0.5)	(1.1)
At the end of the year	(3,057.6)	(3,425.2)	(801.1)	(893.4)

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:

	2020 £m	2019 £m
Sales of services	438.3	455.8
Charitable contributions advanced to related parties	0.4	0.5
Purchase of goods and services	0.1	0.1
Costs recharged at nil margin under transitional service agreements	-	0.2
Interest income and fees recognised on loans to joint ventures	4.0	4.3
Amounts owed by related parties	147.9	182.9
Amounts owed to related parties	4.8	0.6

Sales of services to related parties during the year mainly represent non-household wholesale charges to Water Plus that were bulled during the period. These transactions were on market credit terms in respect of non-household 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.

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A6. Related party transactions (continued)

At 31 March 2020, amounts owed by joint ventures, as recorded within trade and other receivables in the statement of financial position, were £147.9 million (2019: £182.9 million), comprising £52.9 million (2019: £39.4 million) of trade balances, which are unsecured and will be settled in accordance with normal credit terms, and £95.0 million (2019: £143.5 million) relating to loans. Included within these loans receivable were the following amounts owed by Water Plus:

- £93.6 million outstanding on a £100.0 million revolving credit facility provided by United Utilities Water Limited, which is guaranteed by United Utilities PLC, with a maturity date of 30 September 2021 (2019: maturity date of 30 September 2019), bearing a floating interest rate of LIBOR plus a credit margin. This balance comprises £98.0 million outstanding net of £4.4 million allowance for expected credit losses (2019: £nil allowance for expected credit losses) recognised in the income statement during the year;

- £nil (2019: £9.6 million) receivable being the £10.0 million (2019: £9.6 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 £0.5 million (2019: £nil) allowance for expected credit losses recognised in the income statement during the year, and £9.5 million (2019: £nil) of the group's recognised share of joint venture losses as the loan 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 2020 of £12.5 million, comprising the £10.0 million (2019: £9.6 million) receivable measured at fair value, and £2.5 million (2019: 2.9 million) recorded as an equity contribution to Water Plus recognised within interests in joint ventures; and

- £nil outstanding on a £32.5 million revolving credit facility provided by United Utilities PLC, with a maturity date of 30 September 2021 (2019: maturity date of 30 September 2020), bearing a floating interest rate of LIBOR plus a credit margin.

A further £1.4 million of non-current receivables (2019: £1.4 million) was owed by other related parties at 31 March 2020.

The allowances for expected credit losses of £4.4 million and £0.5 million, recognised against the revolving credit facilities and zero coupon shareholder loan note respectively, together with the £9.5 million share of joint venture losses recognised against the zero coupon shareholder loan note, result from the impacts of the COVID-19 pandemic, which has resulted in Water Plus recognising significant losses during the year and has caused a significant increase in credit risk. No allowances for expected credit losses or share of joint venture losses were recognised against any of these balances in the prior year.

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 (2019: £58.1 million), of which £32.1 million (2019: £35.1 million) related to guarantees to United Utilities Water Limited.

At 31 March 2020, amounts owed to joint ventures were £4.8 million (2019: £0.6 million). Included within this amount is £4.5 million due to Water Plus for the surrender of consortium relief tax losses for the year ended 31 March 2020. The amounts outstanding are unsecured and will be settled in accordance with normal credit terms (2019: same).

At 31 March 2020, amounts owed to related parties were £4.8 million (2019: £0.6 million). Included within this amount is £4.5 million due to Water Plus for the surrender of consortium relief tax losses for the year ended 31 March 2020. The amounts outstanding are unsecured and will be settled in accordance with normal credit terms.

Details of transactions with key management are disclosed in note 3.

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A6. Related party transactions (continued)

The following transactions were carried out with the group's ultimate parent undertaking, United Utilities Group PLC:

	Interest receivable	
	2020	2019
	£m	£m
Ultimate parent undertaking	32.9	30.5

	Intercompany group tax relief payable	
	2020	2019
	£m	£m
Ultimate parent undertaking	6.2	5.8

	Amounts owed by related parties		**Amounts owed to related parties**	
	2020	2019	2020	2019
	£m	£m	£m	£m
Ultimate parent undertaking	1,764.1	1,730.8	89.1	82.1

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 £517.9 million (2019: £617.4 million), including dividends totalling £513.2 million (2019: £375.6 million) received from United Utilities North West, a dividend of £4.7 million (2019: £2.1 million) received from United Utilities (Tallinn) BV and a dividend of £nil (2019: £239.7 million) received from United Utilities Utility Solutions Holdings Limited prior to its dissolution.

Total interest receivable during the year from subsidiary undertakings was £31.1 million (2019: £30.6 million), and total fair value gains during the year relating to balances with subsidiary undertakings were £17.6 million (2019: £27.9 million gains). In addition, total net interest receivable during the year from the ultimate parent company was £32.9 million (2019: £30.5 million). Amounts outstanding at 31 March 2020 between the parent company, subsidiary undertakings and ultimate parent undertaking are provided in notes 13, 21 and A3.

An allowance for doubtful receivables of £97.4 million (2019: £95.9 million) has been made for amounts owed by subsidiary undertakings (see note 14). In the year ended 31 March 2020, a charge of £1.5 million was recorded in respect of bad or doubtful receivables due from subsidiary undertakings (2019: £0.7 million charge).

As at 31 March 2020, total guarantees given by the company to its related parties were £1,934.5 million (2019: £1,999.9 million). Included within these guarantees were the following amounts:

- £1,771.2 million (2019: £1,831.0 million) relating to United Utilities Water Limited's loans from the European Investment Bank;
- £98.0 million (2019: £100.0 million) relating to Water Plus's revolving credit facility from United Utilities Water Limited;

Notes to the financial statements - Appendices

A6. Related party transactions (continued)

- Guarantees with an aggregate limit of £54.1 million (2019: £58.1 million) relating to Water Plus in respect of certain amounts owed to wholesalers, of which £22.0 million (2019: £24.0 million) related to guarantees to United Utilities Water Limited; and
- Performance guarantees with an aggregate limit of £11.2 million (2019: £10.8 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 109 to 113.

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.

Notes to the financial statements - Appendices

A7. Accounting policies

Revenue recognition

Revenue represents the fair value of the consideration receivable in the ordinary course of business for 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.

The group recognises revenue generally at the time of delivery and when collection of the resulting receivable is reasonably assured. Should the group consider that the criteria for revenue recognition are not met for a transaction, revenue recognition would be delayed until such time as collectability is reasonably assured. Payments received in advance of revenue recognition are recorded as deferred income. This includes the revenue in respect of connection activities which has been impacted by the adoption of IFRS 15. 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 in a number of jurisdictions. 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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

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 77 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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Property, plant and equipment (continued)

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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Intangible assets (continued)

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.

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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Financial instruments (continued)

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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Financial instruments (continued)

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 A5).

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.

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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Financial instruments (continued)

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. 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.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

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, at the commencement date, a right-of use asset and lease liability is recognised. The lease liability is measured at the present value of future lease payments due over the term of the lease. The typical items which the group leases include land, buildings and vehicles.

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 also made.

Right-of use assets are recognised as property, plant and equipment at cost, this is generally equivalent to the initial measurement of the lease liability. Depreciation is charged on a straight-line basis over the term of lease.

Notes to the financial statements - Appendices

A7. Accounting policies (continued)

Leases (continued)

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 also made.

Where leases have a term of less than 12 months or are leases of low value assets, the group has elected not to recognise right-of-use assets and lease liabilities as permitted by IFRS 16 'Leases'. Lease payments are instead charged to the income statement on a straight-line basis over the period of the lease.

Notes to the financial statements - Appendices

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 held	Proportion of share capital owned/voting rights %	Nature of business
Subsidiary undertakings			
Great Britain			
Halkyn District Mines Drainage Company Limited*	Ordinary	99.9	Dormant
Lingley Mere Management Company Limited*	Ordinary	90.6	Property management
North West Water International Limited	Ordinary	100.0	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	Non-trading
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	Waste treatment
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	Holding company
Thailand			
Manta Management Services Limited(2)*	Ordinary	100.0	Management company

Notes to the financial statements - Appendices

A8. Subsidiaries and other group undertakings (continued)

	Class of share capital held	Proportion of share capital owned/voting rights %	Nature of business
Joint ventures			
Lingley Mere Business Park Development Company Limited*	Ordinary	50.0	Development company
Selectusonline Limited	Ordinary	16.7	Procurement portal
Water Plus Group Limited(3)	Ordinary	50.0	Water and wastewater non-household retail
Water Plus Limited(3)	Ordinary	50.0	Water and wastewater non-household retail
Water Plus Select Limited(3)	Ordinary	50.0	Water and wastewater non-household retail
Estonia			
AS Tallinna Vesi(4)*	Ordinary	35.3	Water and wastewater 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) Registered address: Unit 2201, Soi Chan , Yak3, Chan Road, Thung Wat Don Sub District, Sathorn Distric, Bangkok 10120

(3) 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

(4) Registered address: Ädala 10, Tallinn 10614, Estonia