United Utilities Water Limited

Annual Report and Financial Statements

31 March 2019

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Directors, advisers and other information

Non-executive directors

Dr John McAdam Stephen Carter Mark Clare Alison Goligher Sir David Higgins (appointed 13 May 2019) Brian May Paulette Rowe Sara Weller

Executive directors

Steve Mogford Steve Fraser Russ Houlden

Secretary

Simon Gardiner

Auditor

KPMG LLP St Peter's Square Manchester M2 3AE

Registered office

Haweswater House Lingley Mere Business Park Lingley Green Avenue Great Sankey Warrington WA5 3LP

Regulatory reporting:

Regulatory reporting information for the year ended 31 March 2019 is contained in the separate Annual Performance Report, which has been prepared in accordance with regulatory reporting guidelines, and will be available separately once filed with Ofwat.

Terms used in this report:

United Utilities Water Limited'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. The 'group' means United Utilities Water Limited and its subsidiary undertakings. The 'company' or 'UUW' means United Utilities Water Limited. The 'regulated business' or 'regulated activities' means the licensed water and wastewater activities undertaken by United Utilities Water Limited in the North West of England.

Cautionary statement:

This report contains certain forward-looking statements with respect to the operations, performance and financial condition of the group. By their nature, these statements involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements reflect knowledge and information available at the date of preparation of this annual report and the company undertakes no obligation to update these forward-looking statements. Nothing in this annual report should be construed as a profit forecast.

Chairman and Chief Executive Officer's review



Dr John McAdam, Chairman, and Steve Mogford, Chief Executive Officer

Overview

This has been a busy year. Extreme weather caused operational challenges for the sector as a whole, and we submitted our business plan for the next regulatory period. Throughout these competing priorities, we maintained a resilient and high-quality service and grew stronger as a company.

We made further improvements in customer satisfaction and delivered our best performance to date against our

outcome delivery incentives, despite our targets being tougher this year. We met our leakage target for the 13th consecutive year, and we maintained high standards of environmental performance and drinking water quality.

Our 2020–25 business plan submission received the highest grades in the sector and a fast-track rating in Ofwat's initial assessment.

These achievements are a testament to the transformation we have delivered over recent years and the hard work of all our team.

Continuing to improve service for customers

Our purpose and strategy are centred around customers. This has been our focus for many years and underpins customer satisfaction improvements year after year.

We achieved our best ever Service Incentive Mechanism (SIM) scores this year, and our performance across the first four years of this regulatory period means we expect to be eligible for a financial reward of around £16 million.

Proving that good service costs less, we have reduced the amount it costs to serve our customers by 27 per cent since the start of this regulatory period, as a result of our improved operational performance, digital strategy, and driving down bad debt.

Our household bad debt has reduced from 3.6 per cent of regulated revenue in 2014/15 to 2.1 per cent in 2018/19, and customer bills have reduced in real terms since 2010.

We have taken the lead in transforming how the sector supports customers, particularly those in vulnerable circumstances. We have the sector's most innovative and ambitious assistance schemes, supporting over 100,000 customers struggling to pay. We held the second North West Affordability Summit this year, launching the North West Hardship Hub, the first of its kind in the country. This platform helps the money advice community in our region locate cross-sector assistance schemes all in one place, making it easier for them to find the best help for their clients.

Our efforts are being recognised externally. We were awarded the Institute of Customer Service 'Service Mark with Distinction'. We were the first water company accredited by the Chartered Institute of Credit Management for our work with customers struggling to pay; and we achieved Shaw Trust Accessibility status as a further recognition of our work supporting customers in vulnerable circumstances.

Rising to challenges and improving our resilience

2018 was a year of unprecedented extremes of weather, with a deep freeze and rapid thaw in the early part of the calendar year swiftly followed by an intense heatwave in the summer. It was the driest summer for our region since modern records began in 1961, meaning our impounding reservoirs were at much lower levels than usual. The soaring temperatures contributed to a huge increase in demand for water.

We undertook a series of actions to minimise any impact on customers and protect water resources. We increased communication to encourage customers to use water wisely. We significantly increased our leak detection efforts to help manage leakage. We used our fleet of Alternative Supply Vehicles (ASVs) to help maintain pressure in the network at peak times. We brought back into service groundwater supplies such as boreholes that had not been used for many years, and we used our West East Link Main to pump water around our region.

The tireless hard work of our employees, together with the support of customers and regulators over this period, meant we were able to maintain an unrestricted service to customers. Our ability to manage these extreme conditions further demonstrates the benefits of our Systems Thinking approach. Many of the actions we took to protect service to customers would not have been possible without it.

Our actions resulted in one-off additional costs of around £80 million, which has further improved the high level of resilience we have already embedded into our service. For example, our investment in ASVs has been critical to improving our water service, an efficient way of helping to keep customers supplied during planned and unplanned interruptions.

Delivering strong and sustainable financial performance

Our financial performance from a statutory perspective has been very good this year.

At £332.8 million profit after tax has remained broadly similar to last year, when it was £339.2 million. This small decrease is driven mainly by a small decrease in operating profit as increased revenues resulting from our allowed regulatory revenue profile have been more than offset by increases in infrastructure renewals expenditure and depreciation, together with exceptional costs associated with the dry weather period experienced during the year. Total costs associated with this period of dry weather are expected to be around £80 million, which includes £25.6 million of operating costs and £10.5 million capital expenditure with the remaining amount being capital expenditure.

We have had a pension surplus on an IAS 19 basis for many years and this is well controlled through our asset-liability matching approach. The IAS 19 surplus increased to £373.8 million at 31 March 2019.

The funding position is assessed using a different basis to value liabilities. While maintaining a pension surplus on an IAS 19 basis, we have had a deficit on a funding basis, and have been making deficit recovery contributions of around £33 million per year. It was confirmed in the most recent triennial valuation, signed off as at 31 March 2018, that these contributions would address the funding deficit by December 2021. However, in April 2019, we prepaid the remaining agreed deficit recovery contributions at a discount, meaning we are now in a pension surplus position on an IAS 19 basis and have eliminated the deficit on a funding basis, achieving self-sufficiency.

This is a responsible approach, mitigating risk for all of our stakeholders at a time when regulators, including Ofwat and The Pensions Regulator, are highlighting the importance of this area and in some cases, intervening to protect pension scheme members and customers.

As part of our business plan submission for the next regulatory period, we have set out a range of considerations that will determine the future level of dividends paid. One of these is the impact of pension deficits. With our historic well managed approach to pensions and strong level of

funding, we do not expect future funding of our pension scheme to act as a constraint in the 2020–25 period.

We have a consistent policy of targeting gearing of 55–65 per cent, measured as net debt to regulatory capital value. This has been supportive of United Utilities Water Limited's A3 credit rating with Moody's, which affirmed a stable outlook on our credit rating following Ofwat's initial assessment of business plans, despite retaining a negative outlook on the sector in general.

This, alongside our pension position, gives us an extremely robust capital base and provides a high degree of resilience and financial flexibility as we look to the future.

Performing well against our regulatory contract

From an economic perspective, there are four key drivers of value – total expenditure (totex), SIM performance, outcome delivery incentives (ODIs), and financing. We are delivering good results against all of these areas, demonstrating strong all-round performance in the current regulatory period.

As previously mentioned, we anticipate being eligible for a SIM reward of around £16 million thanks to our improved performance for customers.

On financing, the low cost of debt we have locked in places us in a strong position to outperform the industry allowed cost of debt in the current regulatory period, and into the next period.

On totex, we remain confident in outperforming our totex allowance by £100 million against the scope of our 2015–20 final determination.

Sitting outside the scope of the final determination is an additional £350 million we have committed to invest from our total outperformance, including £250 million in resilience that we had committed to previously and £100 million to give us a flying start for the next regulatory period, and the £80 million additional totex related to the dry weather event.

Although our ODI reward-penalty range was skewed to the downside, we expect to earn a net reward of around £30 million for the 2015–20 period. This year's performance was our best so far, with a net reward of £19.2 million bringing our cumulative position for the first four years of the period to a net reward of £21.4 million.

This performance, across the range of our ODIs, demonstrates the benefit of the accelerated investment we made early in the period. It is particularly pleasing given we were delivering against increasingly challenging targets and dealing with extremes of weather. Our expected out-turn position equates to performance towards the top end of our estimates, providing a solid foundation for the next regulatory period.

Achieving a fast-track rating for our business plan

Our business plan submission for the 2020–25 period received the highest grades for the sector against the test areas set out in Ofwat's initial assessment, and was commended as industry leading in many areas.

This achievement demonstrates the transformation we have achieved in recent years, both in terms of operational performance and efficiency, as well as the high quality of our plan and our ambition for further improvement in the next regulatory period.

As previously mentioned, we have committed an additional £100 million investment towards a flying start to the 2020–25 period. The main priorities for this investment include three of our toughest performance targets: leakage, supply interruptions and sewer flooding.

Supporting our employees' health and wellbeing

We are committed to protecting the health and wellbeing of our employees, and have made significant efforts in this area over recent years.

We engage with employees to help them with lifestyle choices. For example, we help them to quit smoking and offer incentives or those who stay smoke-free for six months. We have reduced employee inactivity rates through initiatives such as standing desks and walking meetings, as well as offering discounted gym memberships and an onsite gym at our head office. We offer nutritional programmes and have health kiosks where employees can measure their weight and blood pressure.

As well as physical health, we focus on mental health. We offer free confidential support services for employees, and have trained mental health champions and first aiders across the business. We joined other businesses in the year in an initiative aimed at ending the stigma of talking about mental health in the workplace.

Our progress in this area has been recognised externally. We were named one of Britain's Healthiest Workplaces 2018 and the third most improved organisation; we were reaccredited with the Workplace Wellbeing Charter in 2018; and we received two employee wellbeing accolades at the Reward and Employee Benefits Association (REBA) awards for physical wellbeing and mental wellbeing.

Maintaining high standards of corporate governance

We consistently operate in a manner that aims to deliver the highest levels of corporate governance. Our board continues to provide sound and prudent governance, consistent with the principles of the UK Corporate Governance Code.

We continued to demonstrate good drinking water quality compliance, as assessed by the Drinking Water Inspectorate. We have delivered a range of improvements in our water transformation programme, which has driven a significant reduction in the risk of water quality events. We once again retained Industry Leading Company status in the Environment Agency's annual assessment, and contributed to the United Utilities group achieving a World Class rating in the Dow Jones Sustainability Index for the eleventh consecutive year.

Ofwat's Company Monitoring Framework Assessment provides an assessment of the trust and confidence stakeholders can have in the accuracy, completeness and transparency of company reporting. Integrity is one of our core values and we were delighted to be awarded the top self-assurance rating again this year, the only company to have held this for three consecutive years.

Outlook

The acceleration of investment we made in the current regulatory period, along with our additional investment, Systems Thinking approach and financial risk management, are delivering sustainable improvements in performance and resilience. Our customer satisfaction is among the top of the water and wastewater companies in the sector.

The benefit of accelerated investment to deliver earlier improvements to service is clear to see. Given our total anticipated outperformance for the 2015–20 regulatory period, we are reinvesting £350 million of our outperformance to deliver enhanced resilience and improved performance earlier in the next regulatory period.

We are proud of the transformation we have delivered and the performance of our team during the year. We are excited about the opportunity the 2020–25 period represents as we deliver our purpose to provide great service to customers and communities in the North West, creating long-term value for all of our stakeholders.

We would like to express our gratitude to our employees for their hard work and dedication, and to customers and other stakeholders for their continued support.

Dr John McAdam Chairman **Steve Mogford**Chief Executive Officer

What we do

Where we operate

Our wholesale water team maintains reservoirs and water treatment works across the region and thousands of kilometres of water pipes in order to collect, treat, store and deliver billions of litres of reliable, clean drinking water to millions of customers 24 hours a day.

Our wholesale wastewater team maintains hundreds of treatment works and thousands of kilometres of wastewater pipes in order to collect wastewater from homes, businesses and surface water run-off, transport and treat it, and return treated water to protect our natural environment.

Our household retail team deals with new connections, metering and billing for millions of customers as well as helping vulnerable customers with our Priority Services and other assistance schemes.

We supply 1.7 billion litres a day of clean, treated water to our customers. We gather water for treatment from reservoirs, lakes, boreholes and streams. Our biggest reservoirs are Haweswater and Thirlmere in Cumbria, with Haweswater holding more than 84 billion litres of water when full, and supplying about a guarter of the North West's water supply.

We serve 3 million households and 200,000 business customers (from small shops to large manufacturing companies) served across the North West. We are also one of the largest employers in the North West, with more than 5,000 employees, and 10,000 people engaged through our supply chain, meaning that we support – directly or indirectly – one in every 150 jobs in the region.

We are custodians of 56,000 hectares and much of the land we own and manage is catchment land (the areas immediately surrounding our reservoirs). We believe that quality control starts right from the point of collection, so we manage our catchment land so that it is as clean and sustainable as possible. Much of our land is also open to the public, for the enjoyment of our communities in the North West and tourists visiting the area.

There are over 1,300km of coastline and around 7,000km of rivers flowing across our region. Over 30 of our beaches are designated for swimming and paddling. We are required to meet increasingly stringent regulation standards for bathing water quality to keep our beaches and waters up to scratch.

£3.9 billion investment through our planned capital programme across the current 2015–20 regulatory period is delivering substantial investment and improvements across the North West, and this includes £350 million of additional spend of outperformance earned over the period.

Our water cycle

We collect and treat water - We collect water from the environment, treat and store it in reservoirs. We also open our land to the public, providing access to nature.

We deliver water for our customers use - We maintain thousands of kilometres of pipes through which we deliver high quality drinking water for customers across our region to use.

We remove wastewater and generate energy - We remove wastewater and separate bioresources to generate renewable energy to reduce our carbon footprint and energy costs.

We clean wastewater and return clean water - We clean the residual wastewater to meet stringent environmental consents and return it to the natural environment.

We work in the North West, for the North West. This means 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:

- 7.2 million population expected to grow significantly in the next 25 years
- 17,500 jobs actively supported by our work, with over 5,000 direct employees
- Tourism relied on by Lake District, Liverpool and coastal areas

Social factors

We are leading the sector on affordability and vulnerability:

- 41% of the most deprived areas in the country
- 47% of households have less than £100 savings to cope with unexpected bills
- 18% of households are affected by water poverty, 20% higher than the national average

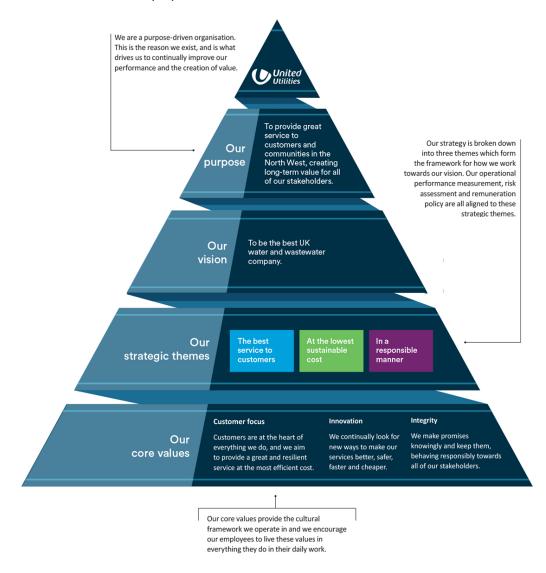
Environmental factors

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

- 30% of land is National Park or Area of Outstanding Natural Beauty or Sites of Special Scientific Interest
- 31 designated bathing waters with 25 'good' or 'excellent' and 6 'sufficient'
- 830mm higher than average UK rainfall each year

Our purpose and strategy

Our core values and strategic themes demonstrate the way we operate in order to work towards our vision and deliver our purpose.



Our marketplace

We are the water and wastewater provider in the North West of England and are subject to economic, quality and environmental regulation.

Key facts:

- 50 million household and non-household customers in England and Wales
- 10 licensed water and wastewater companies
- More than £130 billion invested in maintaining and improving assets and services since privatisation

Our industry and market

Customers in England and Wales are served by ten licensed water and wastewater companies, making up around 95 per cent of the industry, with the remainder being smaller licensed companies providing water-only services.

Since privatisation in 1989, the water industry has invested over £130 billion and delivered a significant contribution to improvements in public health. This investment has led to improvements in the quality of services, significantly higher environmental standards, and superior quality drinking water.

The advancement of technology and innovation makes way for more improvements as we continue to invest to improve services for the long term. Customer bills have declined in real terms in the current and last regulatory periods.

The water and wastewater companies are split regionally based on river catchment areas. United Utilities Water Limited (UUW) operates in the North West of England, and is the second largest of these companies based on the size of our asset base, measured by Regulatory Capital Value (RCV).

We provide water and wastewater services to a population of over seven million people, with over three million household customers making up around two-thirds of our total revenue, and over 200,000 businesses, ranging in size from large manufacturing companies to small shops.

Our competitive environment

Our main competitors are the other water and wastewater companies in England and Wales. Our vision is to be the best UK water and wastewater company, and so we regularly benchmark our performance against these peers.

Our regulators assess our comparative operational performance against the other water and wastewater companies in England and Wales:

- The Drinking Water Inspectorate (DWI) assesses our performance in the water business;
- The Environment Agency (EA) assesses our performance in the wastewater business; and
- Ofwat assesses our customer service performance through its qualitative and quantitative Service Incentive Mechanism (SIM) scores.

The EA performance assessment and qualitative and quantitative SIM scores are included in our operational key performance indicators (KPIs).

As well as assessment against our water peers, we benchmark our customer service performance against other leading service providers in our region.

Our political and regulatory environment

We are subject to regulation of price and performance by economic, quality and environmental regulators, as set out in the diagram. These bodies exist to help protect the interests of customers and the environment.

The political and regulatory framework can change significantly in the long term and we have seen substantial tightening of laws and regulations since privatisation of the water industry. To some extent these changes are outside our direct control. Maintaining good relationships with these bodies enables us to engage positively in order to influence future policy with the aim of achieving the best outcome for all of our stakeholders.

Our competitive advantages

Our pioneering Systems Thinking approach and prudent financial risk management give us a clear competitive advantage.

Systems Thinking improves efficiency and operational resilience. Prudent financial risk management delivers long-term predictability and resilience to financial shocks. These competitive advantages help us to deliver sustainable long-term value for stakeholders.

Systems Thinking

What do we do?

Systems Thinking looks at how each individual element interacts with the other constituents of the system in which it operates. Instead of isolating smaller and smaller elements of the system, Systems Thinking expands its view to consider larger and larger numbers of interactions over time as a particular issue is being studied.

We use this pioneering approach to operate our business. For a water and wastewater company this means, rather than assessing and operating each asset or individual treatment works in isolation, we use all the data from the telemetry backbone we have installed across our network to analyse the entire system and all its linkages, enabling us to find the best overall long-term solutions.

Our field engineers across the region are linked by an Integrated Control Centre (ICC) at head office, from which we plan, monitor and control our operations. We process enormous amounts of real-time data in the ICC from right across our network, as well as factoring in other source data such as weather forecasts, and we have begun using artificial intelligence and machine-learning to process this data and spot issues so that we can work to resolve them before they impact customers. We allocate resources to production teams with full accountability for asset and system performance, helping to embed this way of thinking within our operational teams.

Read more about the rollout of artificial intelligence across our water network on page 35 of the UUG annual report for the year ended 31 March 2019 — just one example of Systems Thinking in action.

Why is this a differentiator?

The water industry was consolidated into its current regions in 1973 and a lot of our assets were originally built a long time ago when water and wastewater services were managed by local authorities with little coordination at a regional or national level.

It takes considerable time and investment to install the telemetry and interconnections across a water and wastewater network to enable a Systems Thinking approach to be used. No other UK water company does this at the holistic level we do, and we are continuing to extend our lead, with new developments and further rollouts in the pipeline.

What value does it create?

Using network-wide real-time data and operating our network in this way enables us to optimise cost and service performance.

Systems Thinking is improving the reliability and resilience of our assets, reducing unplanned service interruptions, and helping us move away from the traditional reactive approach to address problems proactively before they affect customers.

This approach is helping us deliver operational improvements and £100 million cost savings versus our original business plan for the current regulatory period. Further development of Systems Thinking is embedded into our business plan submission for the 2020–25 period. It is part of our long-term strategy to continue delivering benefits for customers and other stakeholders well into the future.

Prudent financial risk management

What do we do?

Inflation — we maintain around half our debt in index-linked form, offering good relative value and hedging the impact of inflation on a portion of our regulatory capital value (RCV) and revenue. Most of this is RPI-linked, reflecting the current regulatory model. From 2020 Ofwat will transition towards consumer price inflation including owner occupiers' housing costs (CPIH), so we will gradually increase our CPI exposure, subject to cost and availability, as CPI is the best available proxy for CPIH in the absence of a CPIH debt capital market.

Interest rates — we fix the underlying interest cost on our remaining nominal debt out to ten years, on a reducing balance basis. We have previously supplemented this by substantively fixing interest rates for each forthcoming regulatory period when Ofwat publishes the final determination, including the cost of debt allowance. From 2020 Ofwat will apply debt indexation to the portion of debt assumed to be new debt, so this supplement will not be necessary for the 2020–25 period.

Pensions — we adopt an asset-liability matching approach for our defined benefit pension schemes by investing in assets, such as corporate bonds and gilts and the use of interest rate swaps that perform in line with the liabilities, providing a hedge against changes in swap and gilt yields and therefore stability in our pensions position. The schemes have hedged inflation exposure through RPI gilts and swaps, and in April 2019 we prepaid all remaining deficit repair contributions meaning the schemes are now self-sufficient.

Why is this a differentiator?

Different companies have different levels of risk exposure as a result of preference and/or analysis of the costs and benefits of moving away from a historically different approach. Our prudent approach offers a lower risk exposure than many other companies.

What value does it create?

Effective financial risk management delivers long-term resilience and our clearly articulated policies, covering a variety of market risks, help us reduce our exposure to the economic and regulatory environment, providing more predictable returns to investors.

Our approach to debt financing and interest rate risk management enables us to consistently lock in long-term debt at good relative value, manage uncertainty in Ofwat's approach to setting the cost of debt at each price review, and maintain resilience to financial shocks. Our asset-liability matching approach reduces the volatility of the required funding level of our defined benefit pension schemes, and self-sufficiency means our employees and pensioners are in a very secure position and shareholders are well protected.

All of this underpins our target to maintain gearing (measured as net debt to RCV) within a range of 55 to 65 per cent, which supports a solid A3 credit rating with Moody's for United Utilities

Water Limited, and enables us to maintain efficient access to the debt capital markets across the economic cycle.

Our economic regulation

Ofwat sets the regulatory contract that we will deliver in each five-year period.

Key facts:

- 5-year regulatory contracts set by Ofwat for Asset Management Plan (AMP) periods
- AMP6 covers 1 April 2015 to 31 March 2020, with four of these five years now delivered
- AMP7 covers 1 April 2020 to 31 March 2025, with business plans already well progressed and final determinations due in December 2019

Setting our regulatory contract

Water and wastewater companies in England and Wales operate within five-year regulatory periods known as Asset Management Plan periods (AMPs). Price, service and incentive levels are set by our economic regulator, Ofwat, prior to the start of each regulatory period following a period of consultation and planning known as a price review.

During the price review, Ofwat consults with stakeholders, including water and wastewater companies, and sets out its methodology, which details its key areas of focus and an indication of how prices, service and incentive levels will be set.

Companies consult with customers and other stakeholders, including environmental and quality regulators, and prepare a detailed business plan that sets out the proposed price and service package they will deliver over the period.

These plans are submitted to Ofwat, which scrutinises and challenges them and ultimately sets a regulatory contract for each company, known as the final determination (FD). The FD sets the price, in terms of total expenditure (totex) and customer bills, level of service, and incentive package that companies must deliver over the period. It gives an allowed return companies can earn, which is expressed as a percentage of Regulatory Capital Value (RCV).

We base our plan on continuous customer insight and bespoke research and consultation on customer priorities, factoring in long-term planning as well as what is needed in just that five-year period. This means we can submit a robust and balanced plan to Ofwat. This helps ensure we receive a regulatory contract that targets the best overall outcomes for our customers and all our stakeholders, and which effectively incentivises us to continually improve our performance.

We have just delivered the fourth year of the sixth asset management plan period (AMP6) that covers the 2015–20 regulatory period. The 2019 price review (PR19) that will set the regulatory contract for the 2020–25 period (AMP7) is well under way. Key dates in the PR19 process can be seen on the timeline below.

Delivering that contract

In order to incentivise companies to deliver sustainably better and more efficient performance, Ofwat gives companies the opportunity to earn a higher return where they outperform their regulatory contract, and the risk of earning a lower return where they underperform. The opportunity for outperformance allows us to create further value for customers, shareholders and wider stakeholders. We can outperform through:

- Totex delivering the agreed outcomes while spending less than the allowed totex through innovation and efficiency initiatives. Totex outperformance is shared roughly 50:50 between customers and the company.
- Outcome delivery incentives (ODIs) beating the stretching target levels agreed for an assortment of measures, mainly of customer service and environmental performance.

- Customer satisfaction delivering a great level of customer service that is favourable relative to the other water and wastewater companies, currently measured through Ofwat's quarterly service incentive mechanism (SIM) surveys.
- Financing raising debt finance at a cost below the industry allowed cost of debt, which forms part of the overall allowed return.
- Household retail minimising the cost to serve our household customers relative to the allowed revenue for household retail activities.

We include our performance against each of the above areas in our operational KPIs, including our targets for the 2015–20 regulatory period. Since the start of AMP6 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 in the above areas.

Our business plan submission for 2020-25

Meeting the high hurdle to achieve a fast-track assessment

Key facts:

- Fast-track rating received for our high quality and ambitious plan
- Lower bills for customers in real terms to 2025
- £100 million additional investment in 2019/20 to facilitate a flying start to AMP7

Overview

We submitted our business plan for the 2020–25 period in September 2018, and Ofwat published its initial assessment (IAP) on 31 January 2019, in which we were one of only three companies to achieve a fast-track assessment. This achievement reflects the transformation we have delivered in recent years as well as the quality of our plan.

Our plan received the highest overall grades for the sector, as can be seen in the table below. It was commended as high quality and industry-leading in many areas, including innovation, affordability and vulnerability, customer engagement, and resilience. We committed to deliver more for less for customers, with stretching service level targets alongside a significant bill reduction in real terms.

As part of the IAP, all three fast-track companies accepted targeted actions from Ofwat. There were areas of our plan where we were asked to commit to even more stretching targets, such as reducing leakage, a further 3 per cent reduction in total expenditure, and provide more information on our proposals. We will continue to work constructively with Ofwat through to our final determination in December 2019.

A fast-track assessment brings reputational, financial and procedural benefits. Most importantly, it gives us greater clarity earlier in the process, and we have committed a further £100 million investment in 2019/20 to make a flying start in delivering our plan.

Ofwat published its latest annual Company Monitoring Framework assessment, in which we retained the highest category of 'self-assurance'. We have achieved this three years in a row – the only company to do so – demonstrating the consistently high level of trust and confidence that customers and other stakeholders can have in the quality and transparency of our reporting.

	u	Water and sewerage companies												Water only companies					
Test Area	Anglian Water	Dwr Cymru	Hafren Dyfrdwy	Northumbrian Water	Severn Trent Water	South West Water	Southern Water	Thames Water	United Utilities Water	Wessex Water	Yorkshire Water	Affinity Water	Bristol Water	Portsmouth Water	South East Water	South Staffs Water	SES Water		
Engaging customers	А	В	С	В	В	В	C	C	В	В	В	C	В	C	C	В	C		
Addressing affordability and vulnerability	В	В	D	В	В	В	В	С	Α	В	С	С	С	С	В	С	В		
Delivering outcomes for customers	В	C	D	С	С	В	C	С	С	С	С	С	С	С	В	С	С		
Securing long-term resilience	С	С	D	С	С	В	D	D	В	С	С	D	С	С	С	D	С		
Targeted controls, markets and innovation	В	С	С	С	С	С	С	С	В	В	В	С	С	С	В	С	С		
Securing cost efficiency	D	D	В		В	В	D	D	В	С	С	С	С	В	С	С	D		
Aligning risk and return*	С	С	D	В	С	В	C	С	С	D	С	D	С	С	С	С	С		
A*	В		D		В	D	D	D	В	В	В	C	D		D	В	В		
Accounting for past delivery*	В	•		·	Ь	•	"	U .	ь	ь	Ь			·		ь			

Ofwat's assessment of company performance against key test areas

Source: Ofwat, PR19 Initial assessment of plans: Summary of test area assessment

- A = High-quality, ambitious and innovative plan with evidence that overall is sufficient and convincing
- **B** = High-quality plan, not sufficiently ambitious and innovative to be exceptional with evidence that overall is sufficient and convincing
- C = Concerns with the plan: Plan falls short of high quality and/or evidence is insufficient and/or unconvincing in some areas
- D = Substantial concerns with the plan: Plan falls significantly short of required quality and/or little or no evidence, or no convincing evidence

High quality and sector leading across a range of areas

Innovation

Our approach to innovation is deeply embedded throughout the entire organisation and we were the only company to receive the highest possible grade in the sub-test for innovation. We are delivering technology and processes that are not seen elsewhere in the industry.

We have delivered enhanced capabilities through our pioneering Systems Thinking approach, which has delivered both efficiency and improved performance, underpinning the transformation we have delivered in recent years. Our business plan includes significant savings to be delivered from our innovation initiatives.

We are actively working with global innovators, from small start-ups to large, established corporations, reaching far beyond the water sector. Through our Innovation Lab, we have gained unprecedented access to very small businesses with very big ideas – companies across the world that would normally struggle to interact with a large utility.

We will exit the current regulatory period as a high-performing and efficient company, and we have achieved this in part by being at the frontier of innovation and technology.

Affordability and vulnerability

Our ambitious and innovative approach to addressing affordability and vulnerability is seen by Ofwat as sector-leading and we received the highest available grade in this key test area.

Our plan represents a strong value for money proposition, supported by over 80 per cent of customers. Average customer bills are lower with a real reduction of over 10 per cent between 2020 and 2025 supported by targeted financial assistance for those who need it most, while service and environmental quality continue to improve.

Our region is home to some of the most deprived communities in England and Wales. We have worked hard to put in place some of the most innovative and ambitious affordability schemes in the industry, and have taken a lead on transforming the sector's approach to supporting customers in vulnerable circumstances. Our plan will push the industry frontier through innovative affordability schemes, such as our Lowest Bill Guarantee, which gives confidence to customers that a meter would save money, as well as water.

This year we hosted the second North West Affordability Summit, working alongside charities, local authorities and support agencies to find ways to help customers in need. At this second summit we launched the North West Hardship Hub, a one-stop-shop portal for cross-sector information and financial assistance schemes to help the money advice community find the right support for vulnerable people.

Customer engagement

Our high-quality approach to customer engagement was recognised by Ofwat in its assessment, as was our ambition and innovation in bringing research findings together with other sources of customer data to gauge customer support for our plan. One test area Ofwat asked us to improve was delivering outcomes for customers, with more evidence on some performance commitments and commit to more challenging targets to align with the results of customer feedback and the industry frontier.

Our plan reflected unprecedented engagement with customers, regulators and other stakeholders. Over 140,000 people from all walks of life were involved in informing our plan through over 90 bespoke engagement exercises. We used a range of research techniques, including online surveys, co-creation events and online panels tailored to the target audience. Our use of new techniques, such as immersive research and behavioural economics, to get better insight into customers' preferences and to supplement stated preference approaches, was highlighted by Ofwat as ambitious and innovative. Over 2 million individual data points, from day-to-day interaction with customers, were used to create our plan.

The independent customer challenge group, YourVoice, monitored our performance during the current regulatory period and was deeply involved in challenging our plan for 2020–25.

Resilience in the round

We have seen record-breaking extremes of weather in the last few years that have tested the industry. Learning from this, we have already made significant progress in enhancing operational resilience, and we are investing an additional £250 million in the current regulatory period to improve this further.

We were assessed as an industry leader in our approach to securing long-term operational, corporate and financial resilience. Our Systems Thinking approach has been fundamental to this assessment, and our robust capital structure, appropriate level of gearing, prudent financial risk management and strong pensions position contribute to the strength of our long-term resilience.

Our plan proposed a major water resilience scheme in Manchester and the Pennines, which will mitigate the most significant operational risk that we face. Ofwat recognises the need for investment to deliver resilience and welcomed the fact that we have embraced the direct

procurement approach in our proposal. Given its scale and complexity, this will be addressed outside the constraints of the fast-track timetable.

As a contribution to national resilience, we devised a large-scale north-south water transfer scheme some time ago. Ofwat is proposing to allow up to £25.7 million to further investigate this scheme in collaboration with two other water companies to determine whether it would be a strong value-for-money proposition.

Aligning risk and return

Our plan provides for a fair balance of risk and return, with rewards available for the delivery of stretching performance. We have a responsible corporate structure aligned with industry-leading environmental performance and strong financial resilience, and we provided strong evidence about the financeability of our proposed business plan.

We committed to provide £71 million of company funding over the period toward financial assistance schemes for customers in need, building on our sector-leading approach to affordability and vulnerability.

In addition, we proposed a clearly defined benefit sharing mechanism through our 'CommUnity Share' scheme, which offers to match benefits for customers if dividends are much higher than assumed in our business plan. We will consult with customers and stakeholders, under the supervision of the independent customer challenge group, YourVoice, about how this funding will be used, with transparency about how this funding would be used for customer benefit.

This builds on the voluntary reinvestment of over £600 million that we have already committed across the current and previous regulatory periods. Ofwat recognises that this approach puts us among the leading companies in terms of voluntary benefit sharing with customers.

Stretching service levels and efficient cost

Driving efficiency is a key focus for management and Ofwat found ours to be one of the most efficient plans when compared with its own view of efficient costs.

Our business plan represented a reduction of over £1 billion in expenditure compared with AMP5 (covering 2010–15), driven by innovation, use of market mechanisms, and the significant improvement that we have made in efficiency in recent years. All three fast-track companies were asked to reduce their cost proposals by about 3 per cent. This compares with the industry average that was 15 per cent above Ofwat's view of efficient costs.

In household retail, we have substantially reduced our cost base in recent years, primarily through tackling levels of household bad debt, and we were pleased to see that our cost projections aligned with Ofwat's own assessment.

There are 14 common Outcome Delivery Incentives (ODIs) for the industry, where targets are based on upper quartile performance expectations, alongside a suite of innovative, company-specific measures. The targets for common ODIs were updated with Ofwat's latest view based on plan submissions, and may change further as the price review process continues for all companies.

Our business model

We consult and plan for short, medium and long-term horizons

We provide essential water and wastewater services to millions of customers every day, and this relies on a variety of key resources. How we manage these is influenced by external drivers and relationships with a variety of stakeholders.

Consultation with customers and other stakeholders forms an integral part of our planning process across the short, medium and long term, and our work delivers a range of long-term benefits for many different stakeholder groups. This value creation feeds back into the continuous cycle of what we do.

Our external drivers and relationships

Natural environment

The natural environment is constantly changing, and we must adapt and prepare for future impacts such as climate change and population growth. 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.

Technology and innovation

New technologies and innovative ideas present opportunities for us to make things faster, better, safer and cheaper. These can come from all over, which is why 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.

Stakeholders

Our work and the huge areas of land we manage puts us at the heart of communities in our region, and impacts a large variety of stakeholders. We build relationships and consult with them in developing and executing our plans.

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, engaging actively and influencing where we can.

Political environment

We engage with regional and national politicians as well as policy makers, through regular meetings and conferences, in relation to areas such as our local investment schemes, our economic contribution to the North West, and key policy issues affecting the water industry.

Economic environment

We are impacted by market rate movements, such as interest rates and inflation, and seek to manage these prudently to reduce risk as far as practical. We operate in an area with high levels of extreme deprivation, so helping vulnerable customers is particularly important for us.

Our key resources

Natural resources

We rely on natural sources of water that we collect for treatment, and manage large areas of catchment land in a sustainable way. We rely on watercourses where we return wastewater safely and cleanly to the environment, and we process bioresources from wastewater to generate renewable energy, which helps to reduce our carbon footprint and energy costs.

Assets

Our significant capital investment programme helps to grow our business while building resilience and maintaining and enhancing sustainable long-term assets. We use telemetry across the network to manage our assets as one integrated network from our Integrated Control Centre as part of our Systems Thinking approach.

People

We rely on employees and suppliers to deliver our services to customers. We are committed to attracting, developing, training and motivating a diverse and skilled workforce. We build effective relationships and work with suppliers who share our values. We have management incentives based on performance and a long-term incentive plan.

Financing

Financing allows us to preserve intergenerational equity for customers while funding long-term capital investment. We maintain a robust capital structure with an appropriate level of gearing level and prudent risk management. We have long-term debt locked in at good relative value and maintain access to a range of markets. We proactively engage with equity and credit investors.

We deliver the outcomes set out in our regulatory contract

What we do is set out in our regulatory contract, which details the price and service package we will deliver in each five-year period split out by price control areas – wholesale water, wholesale wastewater and household retail.

How we do it is set out in our strategic themes, and everything we do is underpinned by our values and culture, and our governance and risk management. Our pioneering Systems Thinking approach to operating our business is a competitive advantage.

Our outcomes and KPIs

The best service to customers

Outcomes

- Provide great water;
- Dispose of wastewater; and
- Deliver a service customers can rely on.

KPIs

- Wholesale ODI composite;
- SIM qualitative; and
- SIM quantitative.

At the lowest sustainable cost

Outcomes

- Value for money; and
- Improved efficiency.

KPIs

- Totex outperformance;
- Financing outperformance; and
- Household retail cost to serve.

In a responsible manner

Outcomes

- Protect and enhance the environment;
- Support local communities; and
- Support employees in a safe workplace.

KPIs

- Leakage;
- EA performance assessment; and
- Dow Jones Sustainability Index.

We create long-term value for a range of stakeholders

The work we do delivers a wide range of benefits to a variety of stakeholders, creating long-term sustainable value for many people.

Responsible business runs through everything we do, as evidenced by our business principles.

For shareholders

Many of our shareholders are pension funds and charities and the income that we provide is relied on by millions of people every day. We manage risk prudently and provide an appropriate return, investing in our assets for growth and sustainability.

For customers

Through innovation and efficiency we provide a great service at a lower cost. We support thousands of vulnerable customers through a wide range of assistance schemes.

For employees

We focus on attracting, developing and retaining a diverse workforce, and ensuring that we look after their health, safety and wellbeing. To help ensure the next generation of skilled employees, we run graduate and apprenticeship programmes.

For the 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.

For communities

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

For suppliers

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

Key resources and the impact of external drivers

Natural resources

We rely on a variety of natural resources to deliver water and wastewater services, and we impact those natural resources through our operations, such is the circular nature of the water cycle. We also generate renewable energy from the sun and wind.

We rely on natural sources of water to supply customers. We hold abstraction licences for a number of reservoirs, rivers and boreholes that permit us to take water from the environment in a safe and sustainable way, which we then treat, store and transport across the region.

Nearly half the water we abstract originates from land we own and manage. Run-off from this land impacts the quality of the water, so managing it well helps us provide reliable and clean water, reducing risk and increasing our resilience. We help protect habitats and species designated as nationally and internationally important, many of which make their homes on this land

We rely on watercourses to take effluent back into the environment after extensive cleaning to ensure it meets environmental consents. This protects the health of the natural environment, which enhances recreational value for our communities, protects rare species and wildlife habitats, and provides economic benefits such as underpinning the local tourism industry.

We extract bioresources from wastewater, using anaerobic digestion to break it down into biogas and biosolids. Biogas is used to generate renewable energy through combined heat and power plants, reducing our energy costs and carbon footprint. Biosolids are treated to provide a valuable source of nutrients and organic matter as high-quality fertiliser for farmers.

Impact of external drivers

Natural environment

Our long-term planning looks far into the future to ensure we are prepared for the challenges of a changing natural environment. The most significant anticipated impact comes from climate change, and in particular the long-term changes in average temperature and rainfall. Water companies must adapt to meet the challenges climate change presents, and this creates both risks and opportunities.

The main opportunity is the potential for water sharing. Our region typically receives higher average rainfall than other parts of the country, meaning the availability of raw water tends to be less constrained than in the comparatively drier south. Ofwat indicated in its initial assessment of company business plans for 2020–25 that it would provide us with £25.7 million funding for feasibility and planning work with respect to a potential north-south transfer of water as part of the development of strategic water resources options for the south and south east.

The main risks 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.

Our response to climate change risk can be split into two areas: mitigation and adaptation.

Mitigation - reducing carbon emissions to minimise our contribution to climate change.

The key contributor to climate change is an increase in greenhouse gases. There is global scientific agreement that as a result of human activity the amount of greenhouse gases in the atmosphere is increasing and affecting the global climate. We have been driving down our carbon footprint (net operational emissions in 2018/19 were over 70 per cent lower than 2005/06) and have plans to reduce it further, mainly through our energy strategy.

We have assessed our operational sites for their potential to generate renewable energy through either solar panels or wind turbines. We are working on plans to substantially increase our renewable energy production across the current regulatory period to 2020, mainly from solar, and this year we generated the equivalent of over 20 per cent of our electricity consumption through renewable energy. This provides environmental benefits as well as energy cost savings.

The anaerobic digestion of bioresources reduces our carbon emissions as well as saving energy costs and producing a high-quality fertiliser. Our advanced digestion facility at Davyhulme

wastewater treatment works is one of the largest of its type, making the site energy self-sufficient, with surplus energy exported to the national grid.

Adaptation – improving the resilience in our water and wastewater business.

The potential effect of climate change on our future water resources is considered in our 25-year Water Resources Management Plan, and we published two adaptation reports in 2011 and 2015 outlining our holistic, integrated and partnership approach to a range of short, medium and long-term challenges including climate change.

It is predicted that climate change will result in the North West experiencing higher daily temperatures all year, and a shift in our rainfall from summer to winter. More occurrences of heavy rainfall are expected, with higher rainfall in winter but more frequent and/or severe drought events predicted in summer.

We have first-hand experience of the impacts of extreme weather events on our operations and customers – during 2018 we experienced two weather extremes, with a deep freeze followed by rapid thaw in the early part of the year, and then extremely hot, dry weather coupled with significantly increased demand for water over the summer.

Coping with extreme hot, dry periods requires action in relation to both supply and demand.

Supply is managed by ensuring we continue to have resilient water resources and infrastructure capable of moving water efficiently around the region. We have an integrated supply zone covering the majority of our region operated using our Systems Thinking approach. This helps us to manage water supply and demand and, where there is any potential shortfall, we bring more supplies online to meet demand. Generally this system is proficient, but there are areas that require further improvements to deal with future challenges. Our West East Link Main pipeline runs between Manchester and Liverpool, allowing transfer of water across our region, and the extreme dry weather in 2018 gave us cause to increase the capacity of this pipeline, as well as bringing additional groundwater sources online, both of which increased our resilience.

Demand is managed by encouraging and supporting customers to use water efficiently. We have increased our efforts in this area and ran a number of high profile campaigns in summer 2018 when demand was much higher than normal. We encourage customers to save water through education initiatives to raise awareness, sharing water saving tips on our website and through social media, and providing free water-saving devices. We work with external partners to expand our messaging further afield, and have increased the number of water meters installed, with 44 per cent of households in our region now fitted with meters.

Coping with periods of intense heavy rainfall requires action to cope with excess surface water drainage while minimising the risk of sewer flooding, pollution and spills.

Traditional interventions, such as storage tanks and enlarging sewers, are costly and subject to constraints for space, particularly in urban areas with little permeable ground. Innovation is needed to find new solutions, which is why we have increased our focus on the use of sustainable drainage solutions in recent years, working with partners to transform hard-grey areas into living planted places.

Our operations produce sludges, excavated materials and general office waste, which we are committed to managing in a sustainable way. Less than five per cent of our waste goes to landfill, we use recycled products where practical, and are working to reduce the use of plastics. We look for ways to reduce our use of raw materials to minimise our environmental impact and increase efficiency.

Stakeholders

Our catchment land is open to the public with an estimated nine million visits a year, providing access to the beauty and recreational benefits that the natural environment offers, and boosting the local tourism industry.

Much of our catchment land is managed by tenant farmers, or in partnership with other organisations such as the RSPB and Wildlife Trusts. We are increasingly looking at integrated catchment solutions, taking a holistic view of issues and solutions within catchments, working with others to improve the lakes, rivers and coastal waters in our region, and often utilising the natural environment as part of the solution. We have a long history of doing this through our award-winning sustainable catchment management programme (SCaMP), which has shown we can manage our catchment land to protect and enhance water quality and to provide other benefits such as an improving biodiversity.

We are one of many organisations with a role to play in boosting the quality of bathing water along the North West coast. With strict bathing water standards, we continue to work with partners to improve the quality of rivers and coastal waters, and we give the public real-time information on bathing water quality.

Technology and innovation

Innovation is one of our core values, and we embrace new treatment technologies and efficient approaches that use less resources. The development of connected technologies and Systems Thinking enables greater control and flexibility to operate our networks and assets to reduce our environmental impact.

Regulatory environment

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. The Environment Agency (EA) assesses water companies' performance across a basket of measures including regulatory compliance, pollution incidents and improvement plans.

Political environment

Many of our environmental regulations are based on EU legislation; therefore, there may be changes after the UK leaves the EU. The UK government published its 25-year Environment Plan for England and Wales in 2017, setting out its environmental ambitions. This plan, subject to any changes following exit from the EU, influences our activities and long-term investment plans.

The influence of devolved metro mayors in our region is starting to impact development and spatial planning, including the natural environment. Maintaining a close working relationship helps us work together to improve the natural environment in the region.

Global politics also has an impact on what we do. See pages 42 and 43 for how we are contributing to the UN's Sustainable Development Goal to 'Ensure access to water and sanitation for all'.

Management and measurement

We have an ISO-accredited environment management system that covers the whole business, and is externally certified through six-monthly surveillance visits.

We have a comprehensive set of environmental strategies covering our approach to carbon management, waste and resources, biodiversity and water use.

We manage our own woodland in a sustainable way to protect water quality, conservation, access, recreation and timber, and have been Forest Stewardship Council® (FSC®) certified since 2003.

A number of our operational KPIs are directly linked to the protection and enhancement of the natural environment, such as leakage, EA performance assessment, and some of our wholesale outcome delivery incentives, such as measures of our contribution to improving rivers and bathing waters, and pollution incidents.

We measure and report on our wider environmental performance. Those most relevant to our stakeholders can be found on pages 37 and 38, and information is available on our website at: unitedutilities.com/corporate/responsibility/environment/environment-performance

The principal risks and uncertainties that relate to this key resource are 'Health, safety and environmental risk', 'Water service risk' and 'Wastewater service risk'.

Link to our strategic themes

The best service to customers

Customers have told us they value the natural environment and want us to protect and enhance the region's natural resources as part of our activities, and this was one of the outcomes that we committed to deliver as part of our business plan for the 2015–20 regulatory period. Many of our outcome delivery incentives are directly linked to the environmental impacts of our water and wastewater services and to protecting and enhancing the environment. We help customers do their bit for the environment and save money on their bills through our water-saving initiatives and 'what not to flush' campaigns to prevent sewer blockages.

At the lowest sustainable cost

Our embedded innovation culture helps us find new ways of working that simultaneously reduce costs and protect natural resources. Our approach to catchment management aims to address issues at source rather than through increasingly expensive treatment methods. This approach, as well as our renewable energy generation, makes us less reliant on power and chemicals, which reduces treatment costs as well as carbon emissions and use of natural resources. The work we do to prepare our network to sustainably cope with extreme weather and the challenges of climate change can save repair and recovery costs as well as ensuring a more resilient service for customers.

In a responsible manner

Managing our dependency, use and impact on natural resources is a key expectation of many of our stakeholders. Our monitoring and management of leakage from our water network is a crucial part of responsible water management. We comply with abstraction licences and environmental discharge consents set by independent regulators to safeguard the responsible management of the environmental impact of the water and wastewater services we provide. In addition, our efforts to reduce our carbon footprint and use of plastics makes an important contribution to protecting and enhancing the natural environment and mitigating climate change.

Assets

Our network assets and treatment works are essential to delivering water and wastewater services to customers and protecting public health, and our energy assets enable us to generate energy, which helps reduce costs and minimise our environmental impact.

We are investing around £3.9 billion across the 2015–20 period, and we expect to continue with a substantial investment programme for the foreseeable future to meet increasingly stringent environmental standards and to maintain and improve our assets and services.

Impact of external drivers

Natural environment

We must build increased resilience into all our assets to cope with the anticipated impacts of a changing climate in the long term, including improvements to flood defences. Our assets must be prepared to continue to comply with increasingly challenging environmental constraints in areas such as water abstraction and wastewater treatment levels.

Economic environment

When making strategic investment decisions we must consider the impact on customers' bills and ensure we maintain affordability. 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. For example, we have agreed to spread some of the environmental spend required by current legislation over the next 15 years.

Regulatory environment

Many of our assets are very long-term in nature, such as our impounding reservoirs that can last hundreds of years. Through our economic regulation framework we earn a return, received through revenue, based on a measure of the value of our capital asset base, Regulatory Capital Value (RCV). This mechanism allows us to share the cost of building these long-term assets between the generations that will benefit from them.

Our RCV is over £11 billion, but the gross replacement cost of our fixed assets (including all our reservoirs, treatment works and pipes), i.e. the estimated amount it would cost for another company to build similar assets and networks, is around £90 billion.

Stakeholders

Many of our reservoirs are areas of natural beauty and we permit the public to enjoy access to this land, bringing recreational and health benefits. Other assets, such as our wastewater treatment plants, are close to residential areas and we work hard to minimise odours and other impacts.

New infrastructure projects, such as our West Cumbria pipeline, can impact local communities and we go to great lengths to consult in the planning stage.

Political environment

UK government priorities, including those of the National Infrastructure Commission, will impact the planning of large infrastructure projects. We anticipate an increase in the North West's population of around one million by 2045 (more than the population of a large city such as Liverpool). We are planning to ensure our services and infrastructure are able to meet the needs of this growing population, including new connections and higher demand on our water and wastewater networks.

Technology and innovation

It is important we have the right systems and procedures in place to monitor and control our assets efficiently and effectively. We embrace the opportunity that new technology and innovation presents. This is at the heart of our Systems Thinking approach.

The new Nereda process has transformed the wastewater treatment process, our use of robots in managing the water network has improved efficiency and customer service, and we are using drones to inspect assets with restricted access, which improves health and safety as well as reducing time and costs.

We use technology for renewable energy self-generation, for example our Davyhulme sludge recycling centre employs a groundbreaking configuration of thermal hydrolysis to maximise

energy generation from sludge; and we built Europe's largest floating solar array on our reservoir in Godley, Greater Manchester.

Technological advances can give rise to new risks as well as opportunities. Cyber crime has been on the increase in recent years and, as the holder of customer information, is a threat we take very seriously.

Management and measurement

Our asset management policy, available to all employees on our intranet, details how we will operate, maintain and invest in our assets with the aim of delivering our customer promises and associated outcomes, as agreed at the price review for the current regulatory period.

We monitor the condition and performance of our assets and assess the risk to service provision. Our proactive and reactive maintenance programmes, and focus on asset health performance measures, ensure we are managing our assets in the most efficient way. Our wholesale outcome delivery incentives, which feature as one of our operational KPIs, include measures of asset health such as the resilience of our impounding reservoirs and maintaining our wastewater treatment works.

The principal risks and uncertainties that relate to this key resource are 'Security risk', 'Water service risk', 'Wastewater service risk', 'Compliance risk', and 'Supply chain and programme delivery'.

Link to our strategic themes

The best service to customers

Maintaining and enhancing our assets is essential in order for us to provide the best service to customers. Since privatisation in 1989, we have invested billions in our assets and this has provided substantial benefits to customers, including reduced supply interruptions, reduced sewer flooding incidents, and improved water quality.

At the lowest sustainable cost

We manage our assets in a holistic way that seeks to minimise whole life costs, helping us deliver efficient total expenditure (totex) without compromising on quality of service or long-term resilience. This approach helps us to save future operating costs, reduce future customer bills, and continue to operate in a sustainable manner.

In a responsible manner

We are committed to managing and operating our assets in a way that continues to create long-term value for all our stakeholders. Effective capital investment helps us to meet increasingly stringent environmental standards, which helps to enhance the region's environment, improving bathing waters and protecting indigenous wildlife and habitats.

People

We support thousands of jobs in the North West, including a growing graduate programme and we have been named one of the top 100 apprenticeship employers, helping to secure a legacy for the future in our region. We believe that the most effective decision-making comes from access to a diverse range of people with a broad set of viewpoints.

Fundamental to the performance we deliver is a skilled, engaged and motivated team of employees, suppliers and contractors. We provide comprehensive training and development opportunities for our employees. Competitive wages, benefits and long-term incentives have been shown to enhance quality of work, increase employee retention, and reduce absenteeism, as well as providing societal benefits. Employee retention also helps ensure efficient and effective training and higher levels of performance.

Impact of external drivers

Stakeholders

We are committed to protecting the health, safety and wellbeing of our people. This is fundamental to their welfare and to the reputation and performance of the company, and remains an area of focus as we strive for continuous improvement. We have implemented a number of initiatives over recent years to improve health and safety conditions for our employees, and have been awarded the workplace wellbeing charter.

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. Over the last few years, we have been striving to improve diversity across all types of role and all levels within our business. We established a Gender Equality Network in 2015 to provide role models, mentoring and opportunities. We target diverse shortlists and attraction campaigns for our apprentice and graduate schemes.

Women are represented at all levels of our company. Over a third of our combined board and executive team is female. See chart.



¹ Group board as at 31 March 2019.

Applicants with disabilities are given equal consideration in our application process, and disabled colleagues have equipment and working practices modified for them as far as possible where it is safe and practical to do so.

Economic environment

The availability of skilled engineers depends on economic and social conditions. Our award-winning apprentice scheme and graduate programme help ensure we can continue to attract and train a high calibre of engineers, in a profession which has seen declining numbers in the UK in recent years. Our employees are paid a competitive base salary plus benefits and the opportunity to join the employee healthcare scheme and our share incentive plan.

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 will fully comply with rules on reporting payments to suppliers.

² Executive team excludes CEO, CFO and COO, who are included in group board figures.

³ As at 31 March 2019, there were 11 male and 3 female employees appointed as statutory directors of subsidiary group companies but who do not fulfil the Companies Act 2006 definition of 'senior managers'.

⁴ Employees of each sex as at 31 March 2019.

Technology and innovation

We have an embedded culture of innovation, and it is one of our core values. We encourage ideas from our people as well as from outside our business, both ad hoc and formally through programmes such as our annual CEO challenge.

Management and measurement

We measure employee engagement through an annual survey, and regularly achieve engagement levels 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, and can be found on page 95.

We maintain a comprehensive A–Z suite of policies, which are available to all employees on our intranet. 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.

We convened a cross-company working group to draft our human rights policy statement and assess risks and potential impacts on our stakeholders. These are mapped to, and managed within, our corporate risk register. Our human rights policy can be found on our website, and this has links to other related policies including our modern slavery policy and slavery and human trafficking statement, and sustainable supply chain charter.

The principal risks and uncertainties that relate to this key resource are 'Health, safety and environmental risk' and 'Resource risk'.

Link to our strategic themes

The best service to customers

Our employees and our supply chain act as the face of our business, and therefore are a crucial part of delivering the best service to customers across our entire business. Customer focus is one of our core values that we encourage our people to live by, and we recognise great customer service from individuals, such as through participation in the WOW! Awards.

At the lowest sustainable cost

Comprehensive training and development opportunities for our employees help to improve our internal skills base and therefore quality of work at an efficient cost, as well as creating a more engaged workforce. Management has a range of incentives that focus on performance over a number of years, rather than just the current year, to encourage the delivery of benefits over the longer term.

In a responsible manner

We work with schools, including encouraging the next generation of women into science, technology, engineering and mathematics careers, and with our supply chain partners to give young people not in education, employment or training the chance to gain hands-on experience and basic skills training in the workplace. We are a signatory to the Prompt Payment Code for our suppliers.

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 this investment.

We adopt a prudent approach to managing financial risks, with clear and transparent hedging policies, and our debt portfolio has a very long average life. We maintain a robust and sustainable capital structure, balancing both equity and debt financing, which helps us maintain

a strong and stable investment grade credit rating. This enables efficient access to the debt capital markets across the economic cycle, long-term financial resilience, and reduces our exposure to fluctuating market conditions and regulatory changes.

Impact of external drivers

Economic environment

Changes in economic conditions and financial markets can influence our ability to create value through financing. We mitigate some of the impact through our financial hedging strategies, including our approach to hedging inflation and interest rates.

Interest rates have been comparatively low in recent years, and through our interest rate hedging policy we have progressively locked in these lower rates on our debt portfolio, benefiting our future cost of debt.

Our revenue and regulatory capital value (RCV) are linked to RPI inflation during the current regulatory period. Our inflation hedging policy aims to maintain around half our net debt in index-linked form (where it is economic to do so), as this provides a partial economic offset for our inflation exposure. Periods of lower inflation mean lower growth in revenue and the RCV, but also lower finance costs, and the reverse is true in periods of higher inflation.

Market sentiment can impact our financing. While much of this can be outside of our direct control, we can help inform and influence investor opinion through regular engagement.

Regulatory environment

Our ability to raise efficient financing at a cost cheaper than many of our peers provides the potential to outperform the industry-allowed cost of debt, and we have a long track record of aligning our financial risk management policies with the regulatory model.

We maintain an appropriate level of gearing, measured as net debt to regulatory capital value (RCV), within a target range of 55–65 per cent, which is broadly in line with regulatory assumptions for the 'notional company'.

Our inflation hedging policy aligns with the current RPI-linked regulatory framework, and we have evolved our policy and began introducing CPI-linked debt in line with Ofwat's transition towards CPIH inflation for the 2020–25 period. We issued the first ever CPI-linked notes by a UK utility in 2017 and have continued to increase our CPI exposure where there are good relative value opportunities, but we expect our index-linked debt to remain mostly in RPI-linked form until CPI or CPIH debt and swaps become available in sufficient size at an economic cost.

Our interest rate hedging policy is to fix nominal debt out to 10 years on a reducing balance basis, reducing our exposure to market fluctuations while managing uncertainty in Ofwat's approach to setting the cost of debt at future price reviews. For 2015–20 we also substantively fixed all our nominal debt to the end of the period once the cost of debt was known, but we will not do this for 2020–25 as a result of Ofwat's introduction of indexation on new debt.

Stakeholders

As a subsidiary of a FTSE 100 listed company, we have open and transparent reporting around all of our financing arrangements, which helps to build trust with long-term investors as well as our regulator.

We have proactive engagement programmes debt investors, through which we update them on developments in our business and seek their views, which we consider in our strategic planning.

Technology and innovation

New innovative ways of raising finance often emerge, for example accessing pockets of untapped investor demand via our Euro Medium Term Note (EMTN) programme, CPI-linked

financing, and green bonds have become more prevalent in recent years. We monitor and assess these developments and continue to maintain access to a broad and diverse range of sources of finance in a number of markets, across which we seek the best relative value when issuing new debt.

Management and measurement

We have clearly articulated financial risk management policies, covering credit, liquidity, interest rate, inflation and currency risk.

We maintain relationships with a diverse range of banks, and we periodically refresh our EMTN programme to enable efficient debt issuance under pre-agreed contractual terms. The board delegates authority to the CFO, allowing us to respond quickly to attractive financing opportunities.

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

As part of our planning process, we review key credit ratios against required thresholds for our target credit ratings. Performance against these ratios is regularly monitored, and we maintain relationships with the credit rating agencies to understand methodology changes.

The principal risk that relates to this key resource is 'Financial risk'.

Link to our strategic themes

The best service to customers

Customers benefit from receiving service improvements earlier as a result of our ability to prefund investment in long-term assets, and keeping finance costs down helps us to ensure bills remain affordable. The financial resilience we build through our financial risk management helps to ensure we can continue to provide great service long into the future.

At the lowest sustainable cost

Locking in long-term debt and swaps at good relative value helps keep our finance costs low, and we monitor liquidity and headroom regularly to maintain adequate funding. Our approach and financial risk management reduce our risk exposure and help ensure the sustainability of our ability to efficiently finance our business.

In a responsible manner

Our environmental, social and governance performance and robust capital structure give equity and debt investors confidence in the long-term sustainability of our business, which reduces their investment risk. We do not use offshore financing vehicles, and our open and transparent reporting is trusted by Ofwat who rated us 'self-assurance' three years in a row.

Internal drivers

Systems Thinking

Our pioneering approach to operating our business, which we call Systems Thinking, is one of our competitive advantages and we set out more detail on this on pages 12 and 13.

Systems Thinking is one of the main drivers of the operational performance improvements we have delivered in recent years, as well as helping us achieve significant cost savings.

We have embedded this way of thinking throughout our business, to put in place the telemetry backbone across our network, to gather and analyse data, and to set up our Integrated Control Centre (the 'digital brain' of our network) to remotely monitor and control our assets from our head office. This time and investment has given us a significant advantage.

The best way to demonstrate what Systems Thinking means in practice and the benefits it delivers is to give detailed operational examples.

Since 2015, we have included business insights in each year's annual report covering our integrated control centre, our network sensors and telemetry backbone, our system-wide approach to sludge treatment, and our use of artificial intelligence to deliver advanced water network management.

This year, read more on page 12 about how we are rolling out artificial intelligence across our entire water network through a platform that can assess vast amounts of data on a wide range of factors such as weather, demand for water, pump performance and electricity prices. This was an idea developed through our Innovation Lab, and helps make decisions on the most cost-effective and efficient way to run water pumps, detect burst pipes, and minimise the risk of discoloured water.

Governance and risk management

Good governance lies at the heart of all successful organisations and leads to better management decisions. We strive to operate in a manner that reflects the highest standards of corporate governance, accountability and transparency. Our company structure and governance standards are designed to ensure our board continues to observe sound and prudent governance in compliance with the UK Corporate Governance Code.

Our board members have diversity in terms of experience, skills and personal attributes, and in terms of age, gender and ethnicity, helping to bring a breadth of views in considering strategic decisions and priorities.

We have an anti-bribery policy that all our employees must follow, and processes in place to monitor compliance with the policy. We operate an independently provided, confidential reporting helpline and web portal for employees to raise matters of concern in relation to fraud, dishonesty, corruption, theft, security and bribery, and all claims are fully investigated. Our audit committee has oversight of the policies and procedures in relation to anti-bribery and fraud.

Our anti-bribery policy is available to view online at: unitedutilities.com/corporate/about-us/governance.

Our employees and representatives of our suppliers must comply with our sustainable supply chain charter. This explains that we will not tolerate corruption, bribery or anti-competitive actions, and we expect our suppliers to comply with applicable laws and regulations and, in particular, never to offer or accept any undue payment or other consideration, directly or indirectly, for the purposes of inducing any person or entity to act contrary to their prescribed duties.

Given the complex legal and regulatory environment within which we operate, and the critical nature of our infrastructure and service provision, we are exposed to a broad variety of risks. Mitigating exposure to potential risks helps us improve our resilience.

Accepting some level of risk is a normal and necessary consequence for a commercial organisation in order to run the business in a cost-effective way. However, as you would expect of the provider of an essential service, we adopt a prudent approach to managing risks to our business.

Values and culture

Our core values of customer focus, integrity and innovation start at the top and cascade through all levels of our business. They are interrelated – innovating to improve our services and acting with integrity in the way we conduct our activities helps us to continually improve customer service.

Customer focus

We have instilled a customer-centric approach right across our organisation, and this has been a key driver of the major improvement in customer service. Putting customers at the heart of what we do has helped deliver benefits for shareholders and wider stakeholders.

Integrity

Acting with integrity, both at board level and as a company, underpins our approach to responsible business and building trust. We actively encourage our employees to express their opinions and ideas through various engagement and social channels, such as our employee engagement surveys, intranet, and social media collaboration tool 'Yammer'.

Innovation

Innovation is a critical enabler in creating value. We welcome new ideas and technologies from all levels of our business with employees given the opportunity to develop and present ideas to senior management, from our supply chain, and from industries across the world, including via our Innovation Lab, further details of which can be found on page 37 of the UUG annual report for the year ended 31 March 2019.

See how our core values underpin our strategic themes and contribute towards delivering our purpose and working towards our vision on page 10.

The culture of our company is a combination of our values, attitudes and behaviours, manifested in our operations and relations with all our stakeholders.

See how we are contributing to the UN's Sustainable Development Goal to 'Promote just, peaceful and inclusive societies and institutions' on pages 42 and 43.

The United Utilities way of doing things is to behave as a responsible business and is set out in our 'Business Principles' document, which can be found on our website at: unitedutilities.com/corporate/about-us/governance/business-principles

How we create value for stakeholders

Identifying who our stakeholders are and engaging to understand what matters to them helps enable us to create long-term value.

Why stakeholder engagement matters

Our purpose is to provide great service to customers and communities in the North West, creating long-term value for all of our stakeholders. To create this value, it is important to understand our stakeholders and what matters to them.

The provision of water and wastewater services creates a deep connection between the company and the communities we serve. Our work generates value for the North West economy, for example through job creation and delivering environmental improvements, which underpin the region's tourist economy.

Politicians and the media can influence our priorities and the perceptions of our stakeholders. During the year there has been increased focus on the water sector, from several perspectives including corporate governance, resilience and levels of leakage.

We recognise that we do not operate in isolation and it is not our decision 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.

Understanding what matters to stakeholders will only be achieved by building strong, constructive relationships and engaging regularly. We value the diverse perspectives that a

broad range of stakeholders, representing different and often competing interests, can bring to our decision-making.

The relationships we build 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 trust. The UUG board's corporate responsibility committee meets four times a year and stakeholder engagement is one of its standing agenda items. The chair of the independent customer challenge group, YourVoice, 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, and the value we create for them. Our analysis of what matters most to stakeholders, and how these issues affect our ability to create long-term value in line with our purpose statement, is set out in our material issues matrix on pages 41 and 42.

Customers

How we engage with and are influenced by customers

To deliver a great service in a way that customers value, we need to listen and engage with them in building new solutions. We engage with customers through a variety of channels, including webchat, text and social media. We get feedback on customer interactions every day, and conduct 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 our customer app and redesign of customer bills. 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 engagement, and the Chair regularly attends our board meetings. YourVoice continues to provide challenge and critical support on our delivery of commitments for the 2015–20 period as well as contributing to our business plan for 2020–25.

Top three material issues for customers

Both an external and internal factor - Customer service and operational performance

Both an external and internal factor - Affordability and vulnerability

Both an external and internal factor - Leakage and water efficiency

How we create value for 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 our region
- Through long-term financing and the regulatory framework, we are delivering multi-million pound infrastructure projects, to improve our 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

Best service to customers

Engaging with customers helps us understand what they value most so that we can target our services accordingly.

At the lowest sustainable cost

By achieving sustainable cost reductions we can provide an efficient service, keeping bills low and enabling us to help vulnerable customers.

In a responsible manner

Customers value a company they can trust, and they care about protecting vulnerable people in society. They value the support we provide through our many assistance schemes.

Communities

How we engage with and are influenced by communities

Our work puts us at the heart of local communities, places where customers and employees live and work. When communities come together, whether that is around a particular issue or location, they can often make powerful representations to the company. 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 the water-related issues that matter most to communities we can develop solutions in partnership with them.

We engage through facilitated workshops and community partnerships, such as the North West Hardship Hub to help customers in vulnerable circumstances. Issues raised by communities can present opportunities to improve what we do or to help others, while others can be complex and difficult to handle, with competing interests between different stakeholder groups, and require time and effort to work through.

Top three material issues for communities

External factor - Land management and access

Internal factor - Community investment

Both an external and internal factor - Trust, transparency and legitimacy

How we create value for communities

Short-term

- We look after beautiful landscapes and beaches and open our land to the public, which supports the regional tourism industry and gives communities the 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
- We make a significant contribution to the regional economy through our activities, the people we employ, and the money we spend in our supply chain
- 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

Best service to customers

Customers live and work in the local communities we serve and so they value the work we do to tackle issues together

At the lowest sustainable cost

By operating at the lowest sustainable cost we are able to continue investing in local communities for the long term

In a responsible manner

As they encompass a breadth and depth of people, communities bring a variety of views and issues to our attention, helping us find the most balanced approach in the best interests of all

Employees

How we engage with and are influenced by employees

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, develop our employees and keep them engaged and motivated so we can meet the stretching objectives we set ourselves. 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, value opportunities to learn new skills, and maintain an open and honest dialogue with unions and the business. Line managers play a vital role in supporting employees, with regular one-to-one meetings, and our engagement survey regularly scores above the UK norm. Our new 'employee voice' will ensure their perspective is heard by the board. We have employee-led networks such as for gender, LGBT and disability, and encourage employees to share innovative ideas via many forums.

Top three material issues for employees

Internal factor - Health, safety and wellbeing

Both an external and internal factor - Diverse and skilled workforce

Internal factor - Employee relations

How we create value for 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

- Looking after the health, safety and wellbeing of our employees in the short term, by encouraging them to lead fitter and healthier lives and work in ways that reduce accidents, creates long-term health benefits which, in turn, reduces the burden on healthcare services
- Health, safety and wellbeing extends to mental as well as physical health, and we promote awareness of stress and other mental health issues, promoting an all-round healthy lifestyle in the long term
- We provide pension offerings that help support employees in later life

Link to strategic themes

Best service to customers

Well-trained, engaged and motivated employees who take pride in their work have the ability and drive to deliver the best service to customers.

At the lowest sustainable cost

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

In a responsible manner

We take a responsible approach to protecting the health, safety and wellbeing of our employees.

Environment

How we engage with and are influenced by the environment

We rely on the environment as one of our key resources so it is important for the sustainability of our business that we protect and enhance it. For example, climate change will affect how much water is available and stakeholders are concerned about the resilience of supplies and look to water companies to adapt and take the necessary steps to reduce flood risk.

Given the environment has no voice of its own, we engage with interested groups such as environmental regulators, non-governmental organisations, customers and communities. We conduct facilitated workshops with stakeholders to understand their priorities and have undertaken a large number of customer research projects. 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 for the environment

Internal factor - Resilience

Both an external and internal factor - Environmental impacts

External factor - Climate change

How we create value for the 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
- 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 have invested in new infrastructure, such as our West East Link Main, to allow us to transfer water around the region more efficiently to avoid depletion of individual water sources

Long-term

- Our investment in renewable energy generation is reducing our carbon footprint and contribution to climate change
- We innovate and invest in new technologies to solve environmental challenges for future generations
- We are working on campaigns to educate the public and younger generations on water usage to protect this valuable resource and reduce usage over time
- We plan far ahead to ensure our activities and investment enhance the long-term resilience of the environment

Link to strategic themes

Best service to customers

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

At the lowest sustainable cost

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

In a responsible manner

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

Suppliers

How we engage with and are influenced by suppliers

As well as employees, we rely on suppliers to deliver our services, and the availability of goods and services in the market influences our strategy and how we operate. 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 engage through supplier workshops, including targeted sessions on innovation, and suppliers sign up to our sustainable supply chain charter and support the commitments set out within it, as they recognise the importance of acting responsibly. They often suggest new ways we can meet some of our own responsible business targets. 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 for suppliers

External factor - NW regional economy

Internal factor - Responsible supply chain

External factor - Human rights

How we create value for suppliers

Short-term

- We spend significant amounts 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
 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

Best service to customers

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

At the lowest sustainable cost

Ensuring our suppliers deliver efficient cost is integral to delivering a sustainable low cost for customers, and the shared value of developing innovations together with suppliers can assist with this.

In a responsible manner

Working with responsible suppliers helps us achieve more and succeed together in tackling environmental and social issues.

Politicians

How we engage with and are influenced by politicians

Politicians influence the long-term national water strategy and environmental priorities, as well as other matters that affect how all businesses operate. Engagement with national and local government, as well as elected representatives and devolved administrations, on topics of public interest helps 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 in different political parties on topics of shared interest. We play an active role in trade association Water UK.

Top three material issues for politicians

External factor - Political and regulatory environment

Both an external and internal factor - Leakage and water efficiency

Both an external and internal factor - Trust, transparency and legitimacy

Regulators

How we engage with and are influenced by regulators

Through proactive, constructive engagement with economic, quality and environmental regulators, we agree to deliver commitments over specified time frames. Read more about our regulatory environment on pages 14 and 15. 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 for regulators

External factor - Political and regulatory environment

Internal factor - Resilience

Both an external and internal factor - Trust, transparency and legitimacy

Media

How we engage with and are influenced by the media

The media is intrinsically linked with all our other stakeholders, being influenced by the issues that matter to those stakeholders as well as influencing them through what it reports. It is through the media, and increasingly its social media platforms, that many of our stakeholders receive their information about us and our activities.

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 for the media

External factor - Political and regulatory environment

Both an external and internal factor - Leakage and water efficiency

External factor - Social media

Managing our material issues

Our approach to materiality

Understanding what matters most to our stakeholders is a fundamental part of our planning and day-to-day service delivery. 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 below.

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.

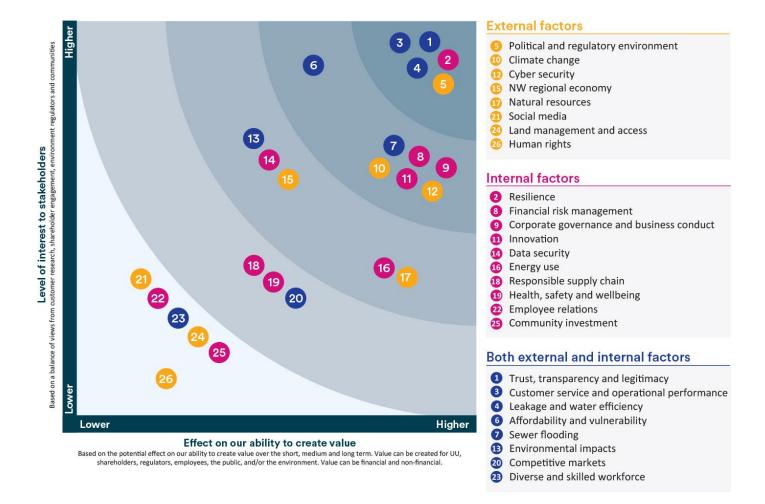
In defining the strategic relevance of an issue to the company, we have adopted the integrated reporting framework definition of materiality, which states: "A matter is material if it could substantively affect the organisation's ability to create value in the short, medium or long term". Value, in this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

Our assessment of the level of interest to stakeholders is based on a balance of views obtained from customers, shareholders, 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 UU's 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 a list of 26 material issues. These issues are impacted by factors that may be external, internal or both — for example, affordability and vulnerability affects customers due to external social and economic factors, and the support services we provide those customers with 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.



UN Sustainable Development Goals

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.

While our work contributes across all of the goals, we have identified five goals that are the most material to our business and the nature of the essential services that we provide. Our approach to operating in a responsible manner aligns quite naturally with these goals. We will increasingly need to work in partnership with all our stakeholders in order to achieve these goals.

The following details show the steps we are taking to meet each of these five 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 thousands of 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, 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 £250 million additional investment in 2015–20 to increase our resilience. Read more about our approach to resilience on pages 47 and 48.

Ensuring the region where we operate has reliable, sustainable and resilient infrastructure for the long term requires innovation to keep pace with an increasingly digital world.

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 far into the future to prepare for increases in the population and new housing that will need connections for water and wastewater services.

To find out more about our community activity see:

https://www.unitedutilities.com/globalassets/documents/pdf/community-activity-booklet.pdf

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 with integrity, and this 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 planning horizons

25+ years – reflecting the long-term nature of our business, which provides an essential service to customers, and helping us to define what we need to deliver in each five-year regulatory period to ensure long-term resilience.

5 years – reflecting the regulatory review periods within which our revenue allowances are set, and helping us move towards achievement of our long-term goals.

1 year – reflecting the annual targets we set to help move us towards achievement of our five-year goals.

Our approach to planning

Our three business areas – wholesale water, wholesale wastewater, and household retail – align with the distinct price controls in Ofwat's regulatory model. Each area undertakes long, medium and short-term planning.

Long-term (25+ years) planning identifies requirements to cope with challenges and opportunities in line with our strategy. This influences our medium-term planning, which sets out how we will deliver the commitments agreed for each five-year regulatory period.

Short-term (one year) planning enables us to monitor and measure progress towards those regulatory commitments. We retain flexibility in these short-term plans to ensure we meet those commitments in the most effective and efficient way as circumstances change.

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.

Over the next 25+ years we will face many challenges and opportunities, 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 that deals 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). Our current plan was published in 2015 covering the 2015–40 period, and we consulted with stakeholders during the year on our new draft WRMP covering the 2020–45 period. 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.

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.

Medium-term planning (5 years)

Each five-year business plan aims to help us work towards our long-term plans and ultimately to achieve our vision.

We submit a balanced plan to Ofwat in order to agree a regulatory contract that allows for the best overall outcomes for our customers, shareholders and the environment.

Once each regulatory contract is set, we create value principally by delivering, or outperforming, that contract by providing the best service to customers, at the lowest sustainable cost, in a responsible manner.

In the 2015–20 period we are delivering:

The best service to customers

 Improving customer service further, fixing issues proactively before they impact customers, reducing the number of complaints, and improving our communication channels

At the lowest sustainable cost

 Minimising our total costs on a sustainable basis, enhancing debt collection activities to deliver a more efficient retail service, raising low-cost finance and managing financial risk to reduce volatility

In a responsible manner

 Meeting regulatory commitments to protect and enhance the environment, increasing our renewable energy generation to reduce our carbon footprint, and providing the best support for vulnerable customers

Wholesale water

Our wholesale water team are:

- Maintaining high levels of reliability and water quality, and reducing the number of times customers need to contact us;
- Making better use of technology for remote monitoring and control of assets;
- Maintaining leakage at or below the sustainable economic level;
- Limiting the customer impact of increases in operating costs, such as chemicals and rates, by making cost savings elsewhere through continuous improvement in operational efficiency; and
- Linking 150,000 customers in West Cumbria to Thirlmere reservoir to protect sensitive ecology in their previous water source and ensure a long-term, reliable supply of drinking water.

Wholesale wastewater

- Our wholesale wastewater team are:
- Making better use of technology, automation and control to drive better customer service at lower costs:
- Reducing the number of customers' properties exposed to sewer flooding, working in partnerships to deliver cost-effective schemes and promoting the use of more sustainable drainage systems;
- Improving bathing water quality and working with other organisations to support them in delivering improvements to our region's beaches;
- Improving water quality in rivers and lakes and engaging with others in our innovative catchment management approach;

- Increasing the production of renewable energy from waste; and
- Constraining the costs of taking responsibility for all private sewers and private pumping stations in the region.

Household retail

Our household retail team are:

- Continuing to improve the customer experience by being more proactive, anticipating problems before they materialise, and improving our communication channels in line with customer preference;
- Further reducing the number of customer complaints, and resolving them whenever we can
 to avoid the need for referral to the Consumer Council for Water;
- Reducing the debt burden for customers and the company by engaging with those who are struggling to pay, helping them return to sustained payment behaviour;
- Expanding our assistance offerings, including the social tariff, and contributing to our trust fund, 'Restart', which has proven effective in helping customers in difficulty return to regular payment; and
- Reducing the cost to serve our customers.

Our plans for the 2020–25 period are set out in our business plan submission.

Short-term planning (1 year)

Short-term planning helps us work towards our medium and long-term goals and is important to monitor and assess our progress against these. This approach helps us ensure the long-term resilience and sustainability of our business through short and medium-term goals that we can monitor and measure our progress against.

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, which are designed to help deliver further improvements in service delivery and efficiency, and to help move us towards achievement of the five-year goals.

Performance against these annual targets determines annual bonuses for executive directors and employees right through the organisation. 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 also assessed against three-year performance, covering total shareholder return, sustainable dividends and customer service, through long-term incentive plans. Details of the 2018/19 annual bonus and vested long-term incentive plans for our executive directors are shown on pages 95 and 96.

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.

For example, during 2018/19 we needed to allocate additional resources to deal with the impact of extreme weather events. We entered the year having experienced a deep freeze followed by a rapid thaw, which had an impact on our levels of leakage, and it was not long before we entered a period of intense hot, dry weather that depleted reservoir levels and saw a surge in water demand.

In response, we substantially increased our leak detection teams and allocated resources to bring additional water resources into operation and increase pumping around the region to balance risk and support the worst affected areas. This resulted in us needing to commit to additional expenditure, but was managed in a way that maintained service for customers and we successfully met our leakage target for the year despite these challenges.

Our approach to resilience

As detailed on pages 17 and 18, in its initial assessment of our business plan for 2020–25, Ofwat commended our approach to resilience as sector-leading and said we set the standard for other companies to aspire to.

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 allows 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. This was instrumental in the way we coped with extreme weather events in 2018, including both the freeze-thaw and the hot, dry summer.

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 predictions for climate change and population growth.

Our business plan submission for 2020–25 contains proposals to address our biggest operational asset risk, the Haweswater Aqueduct that transports water from the Lake District to Greater Manchester.

Our draft 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 at the time of creating the plan, UKCP09); 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.

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 of employees 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 a public listed company, 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.

2020+ We will continue to contribute to improving bathing water quality

2022 We will extend our integrated water supply network into West Cumbria

2025 We will halve the risk of requiring drought permits to augment supply

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

How we measure our performance

We have a range of key performance indicators (KPIs) encompassing the important areas of customer service and environmental performance, as well as financial indicators. Our operational KPIs are aligned with our strategic themes, and our financial KPIs assess both the profitability and sustainability of our business.

Further detail on our performance against our regulatory commitments is published in July of each year in our Annual Performance Report.

In addition to our KPIs and regulatory commitments, we monitor our performance against an assortment of metrics that are of interest to our many stakeholders, and report against these within this report and on our corporate website.

Our key performance indicators (KPIs)

To help measure progress on how well we are delivering the outcomes described in our business model and adding value for all our stakeholders, we focus on a range of financial and operational KPIs. Our executive bonuses and long-term incentives are closely aligned to our financial and operational performance KPIs, as highlighted in the remuneration report on page of

We set operational KPIs for the five-year regulatory period. These align with our three 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 the following pages. These operational KPIs remain consistent with last year.

We set financial KPIs that assess both the profitability and sustainability of our business from a financial perspective. A description of these financial KPIs and our performance against these targets can be seen on page 58. We set internal budgets for financial KPIs but we do not have externally declared targets for these.

This year we have changed one of our financial KPIs. We have removed revenue from the list, recognising that the movements in revenue are dependent on the regulatory mechanism rather than management control, and replaced this with total shareholder return, a measure of movements in the share price plus dividends over the year, which is more important for shareholders. This measure is used for our executive remuneration through the long-term plan, although the time frame of calculation and comparators are different for the one-year KPI and the three-year incentive plan.

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 33 to 43, 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 page 52 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 our stakeholder metrics table also reports 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, but our stakeholder metrics table also reports 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 also regularly report on numerous corporate responsibility performance measures on our external website.

Our operational KPIs

These operational KPIs feed through from our three strategic themes to deliver the best service to customers, at the lowest sustainable cost, in a responsible manner.

Company objective/KPI	Definition	Target	Performance
Best service to custo	omers		
Wholesale outcome delivery incentive (ODI) composite	Net reward/(penalty) accrued across United Utilities' 19 wholesale financial ODIs.	End the 2015- 20 regulatory period with around £30 million cumulative net ODI reward.	2018/19: £19.2 million reward (cumulative £21.4 million reward) 2017/18: £7.0 million net penalty (cumulative £2.2 million net reward)
			2016/17: £6.7 million net reward (cumulative £9.2 million net reward) 2015/16: £2.5 million net reward

Service incentive mechanism – qualitative Service incentive mechanism – quantitative	Ofwat-derived index based on quarterly customer satisfaction surveys, measuring the absolute and relative performance of the 18 water companies. Each company receives a score in the range of zero to five, with five being the highest attainable score. Ofwat-derived composite index based on the number of customer contacts, assessed by type, measuring the absolute and relative performance of the 18 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. 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 2018/19: 70 2017/18: 71 2016/17: 77 2015/16: 95 2014/15: 99	
Lowest quatainable	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: Confident of outperforming the final determination allowance by £100 million over the 2015–20 regulatory period Totex new measure for 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: On track to beat Ofwat allowance 2010–15: Exceeded £300m target	
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.	2018/19: £5m outperformance 2017/18: £9m outperformance 2016/17: £14m outperformance 2015/16: £10m outperformance	

In a responsible manner				
Leakage – average annual leakage	Average annual water leakage from our network quantified in megalitres per day.	To meet our regulatory leakage target, as set by Ofwat.	2018/19: Met target 2017/18: Met target 2016/17: Met target 2015/16: Met target 2014/15: Met target 2013/14: Met target	
Environment Agency performance assessment	Composite assessment produced by the Environment Agency, measuring the absolute and relative performance of the 10 water and wastewater companies across a broad range of areas, including pollution.	To be a first quartile performer (i.e. at least 4 th) on a consistent basis.	2017*: Joint 1st 2016: Joint 1 st 2015: Joint 2 nd 2014: 2 nd 2013: 2 nd *latest available assessment	
Dow Jones Sustainability Index rating	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'	

Stakeholder metrics table

Theme	Area	Measure	Data metri	c Further information	
Shareholders	Compliance	2016 UK Corporate Governance Code	Compliant	Directors' report – statutory and other information	
		Dow Jones Sustainability Indices	World Index	x Our performance - in a responsible manner section	
Customers	Complaints	Total number of domestic customer complaints	7,007	Our performance - best service to customers section	
		Average speed of complaint resolution	3 days	Our performance - best service to customers section	
	Fines	Drinking Water Inspectorate (DWI) fines	2 (£150,000 and £50,000)	Related to two drinking water incidents at Sweetloves water treatment works in 2015	
	Digital	Number of customers using online services - My Account	- 860,648	Our performance - best service to customers section	
	Customer assistance	Number of customers assisted by Priority Services	74,505	Our performance - best service to customers section	
	Customer water efficiency	Total customer water savings from measures promoted by United Utilities	s 4.43 MI/d	Our key resources section	
Environment	Carbon and energy	Carbon footprint	167,856 tCO₂e	Directors' report – energy and carbon	
		Energy used	976 GWh	Directors' report – energy and carbon	
	Waste	Total waste	694,846 tonnes	Responsibility pages of our website	
		Waste to beneficial use	96%	Responsibility pages of our website	
	Leakage	Total leakage at or below target of 462.65 Ml/d	Met target	Annual Performance Report published in July	
	Fines	Number of incidents resulting in fines	0	Our performance - in a responsible manner section	
		Enforcement undertakings	5	Our performance - in a responsible manner section	
			(£1.5m)		
	Natural capital	Number of trees planted on catchment land	27,190	Responsibility pages of our website	
		No net loss of biodiversity across capital programme	100%	Responsibility pages of our website	
Employees	Employee engagement	Overall employee engagement	81%	Our performance - in a responsible manner section	
		Percentage of employees with trade union membership (based on employees who pay their union subscriptions via their payroll)	45%	Our key resources section	
	Workforce profile	83% White 2% BAME 15% Non-disclose health conditions)	d 65% Ma	le 35% Female <1% Disability (including long-term	
	Gender pay reporting	Mean gender pay gap	13.1%	Gender Pay Report on our website	
		Median gender pay gap	15.3%	Gender Pay Report on our website	
	Employee development	Average number of days of training per FTE per year	3.57 days	Our performance - in a responsible manner section	
	Health and safety	Employee Accident Frequency Rate (per 100,000 hours)	0.152	Our performance - in a responsible manner section	
		Contractor Accident Frequency Rate (per 100,000 hours)	0.092	Our performance - in a responsible manner section	
Suppliers	Payment statistics	Average time taken to pay invoices	25 days	Suppliers pages of our website	
	•	Suppliers paid on time	98.57%	Suppliers pages of our website	
Communities	Charity	Match funding to charity through employee efforts	£157,046	Responsibility pages of our website	
	Community investment (LBG data)	How investment was made: Cash £2,717,856 Time £52,409 Mar	nagement co	sts £161,214 Total £2,931,479	
		Type of support: Charitable gift £159,545 Community inve	pport: gift £159,545 Community investment £2,610,719 Commercial initiative £0		
	Employee volunteering	Number of hours' employee volunteering	2,620	Responsibility pages of our website	

Our performance in 2018/19 Operational performance

The best service to customers

Customer service – sitting at the core of everything we do, our strong focus on customer service has helped us deliver substantial improvements 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. This year, we have again gone from strength to strength in our customer satisfaction performance, achieving our highest ever scores against Ofwat's qualitative Service Incentive Mechanism (SIM) measure and finishing fourth out of the water and wastewater companies for the year overall. This performance is mirrored in the number of complaints that we receive. Since 2015/16 we have seen a 30 per cent reduction in complaints and a 64 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. In January, we hosted the second North West Affordability Summit, engaging with customers and key stakeholders.

We have received external recognition for the improvements made in the quality of service we deliver to customers. We are the first water company to receive Shaw Trust Accessibility status for our website, we received the Service Mark with Distinction from the Institute of Customer Service and we won three gold awards at the UK Complaint Handling Awards.

Leading North West service provider – we are consistently ranked third 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 environmentally responsible. We are behind only Marks & Spencer and Aldi, and ahead of seven other major organisations across utilities, telecoms, media and banking.

Robust water supply – customers benefit from our robust water supply and demand balance, along with high levels of water supply reliability. Our overall water quality continues to be good with an improvement in our water quality service index compared with the prior year. It is tracking above our historical average with plans in place to deliver further improvements going forward. We have delivered a reliable water service and although we inevitably experience some water no-supply incidents, our Systems Thinking approach is helping us to reduce the frequency and severity of such events and respond to them in a way that minimises customer impact.

During 2018/19, the UK experienced unprecedented extremes of weather beginning with a deep freeze and rapid thaw followed by the driest summer for our region since modern records began. Thanks to interventions that we were able to make, alongside the support of customers and regulators, we were able to minimise the impact of these events and maintain unrestricted service to customers.

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 includes a target of reducing sewer flooding incidents by over 40 per cent, in line with customers' affordability preferences, and we are making good progress. We achieved our best ever five-year performance on our repeat flooding and internal operational flooding measures.

Our wastewater network will continue to benefit from significant investment going forward and we will continue to seek to work in collaboration with other external flood authorities and associated partners 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, of which ten provide the potential to earn a reward in the 2015–20 regulatory period. In 2018/19 we have delivered our best annual performance against ODIs resulting in a net reward of £19.2 million, reflecting great operational performance across the board. Overall, performance was again good against our wastewater measures, and significantly improved against our water measures with a net reward achieved in both areas.

We are pleased with our cumulative performance over the first four years of the current regulatory period, which have resulted in a net reward of £21.4 million, exceeding our initial expectations. While a number of our ODI measures are susceptible to one-off events and, on the whole, our ODI targets get tougher each year, our strong performance to date coupled with continued targeted investment, alongside our Systems Thinking and innovative approach to the way we operate, gives us confidence that we will achieve a cumulative net ODI outcome over the 2015-20 regulatory period of around £30 million.

Our main areas of reward to date have come through our performance in the areas of private sewers, pollution and leakage. Our main penalty has been on reliable water service and water quality service, although particularly pleasing this year was a significantly improved performance against our reliable water service index where we are seeing the benefit of our targeted investment and Systems Thinking approach.

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. This means we should be eligible for a reward of around £16 million assuming that Ofwat applies the same methodology as at PR14.

Qualitative: Ofwat has undertaken the four surveys for 2018/19 and we have improved our score to 4.53 points, compared with 4.49 points in 2017/18, putting us in fifth position for the year out of the 18 water companies, and fourth position out of the 11 companies providing both water and wastewater services. In particular, customers scored us highly for our billing services.

Quantitative: the quantitative assessment measures customer contacts, and performance is assessed on both an absolute and relative basis. While relative performance can only be assessed in full following the end of each financial year when the other companies publish their respective results, on absolute performance for 2018/19, our score of 70 points represents a further improvement on our 2017/18 score of 71 points. For the first nine months of the year, of the companies that share data on quantitative SIM, we were first of the seven water and wastewater companies and fourth of the 11 water companies.

At the lowest sustainable cost

Power and chemicals – our asset optimisation programme continues to provide the benefits of increased and more effective use of operational site management to optimise power and chemical use and the development of more 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 £59 million in the first four years of the 2015–20 regulatory period. We have also substantially locked in our power commodity costs across 2015–20, providing greater cost certainty for the 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.

Debt collection – our region suffers from high levels of income deprivation and we offer wideranging schemes to help customers struggling to pay. We now have over 100,000 customers on affordability schemes, almost double the commitment we made at the start of AMP6. Notwithstanding our industry-leading debt management processes, deprivation remains the principal driver of our higher than average bad debt and we expect this to continue to be a challenging area for us.

Reflecting our ongoing focus on bad debt through initiatives such as our affordability schemes, our household bad debt expense has reduced to 2.1 per cent of revenue from 2.3 per cent last year.

Pensions – United Utilities has taken progressive steps to de-risk its pension provision. The company had an IFRS retirement benefit surplus of £374 million as at 31 March 2019, compared with a surplus of £264 million as at 31 March 2018. Further details of the group's pension provision are provided in notes 14 and A6 of the financial statements.

From 1 April 2018, the majority of active members in the defined benefit sections of the United Utilities Pension Scheme (UUPS) transitioned to a hybrid section comprising a capped defined benefit element and a top-up defined contribution component. 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.

Capital delivery and regulatory commitments – we are strongly focused 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 are working with a single engineering partner and four design and construction partners to deliver our regulatory capital investment programme of around £3.9 billion. We are involving our partners much earlier in project definition and packaging projects by type, geography and timing in order to deliver efficiencies. Projects are allocated on an incentive or competitive basis leading to our partners presenting a range of solutions, innovations and pricing.

We have accelerated our 2015–20 investment programme in order to improve services for customers and deliver early operational and environmental benefits. Regulatory capital investment in 2018/19 was £821 million. This includes £165 million of underlying IRE, £40 million additional capex and IRE associated with the dry weather in the summer of 2018 and £60 million of additional investment made available through sharing our net outperformance. This, combined with £2.4 billion invested in the first three years of the regulatory period, brings our total spend to around £3.2 billion of our expected £3.9 billion capital investment across the 2015–20 regulatory period.

We are also driving more effective and efficient delivery of our capital programme and applying a tougher measurement mechanism to our Time: Cost: 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. We have not only closed the gap to our allowance but we are now also confident of outperforming that allowance by £100 million. This has been achieved through a combination of driving efficiency into our capital programme and also through Systems Thinking.

Financing outperformance – The low cost of debt we have already locked in places United Utilities in a strong position to deliver significant outperformance for the 2015–20 regulatory period compared with the industry allowed cost.

Household retail cost to serve – We continue to deliver against a challenging benchmark set for AMP6. Our target is to minimise our costs compared with our revenue allowance and we have delivered a good performance in 2018/19, outperforming this year's revenue allowance (including margin) by around £5 million. By 2020, we are forecasting a cost to serve in line with the regulatory cost allowance 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 the manner in which we undertake our business, 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 2018/19 financial year, United Utilities retained a World Class rating in the Dow Jones Sustainability Index for the 11th 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 – although leakage is included within our outcome delivery incentives, we intend to continue publishing our leakage position separately, with it being an important measure from a corporate responsibility perspective. In 2018/19 we have again met our regulatory leakage target of 463 megalitres per day.

Environmental performance – this is a high priority for United Utilities and we were delighted to have retained our Industry Leading Company status in the Environment Agency's latest performance metrics, as described in the KPIs section below. This is a result of our approach to managing our assets in an integrated way to minimise the number of environmental incidents.

Carbon footprint – by 2020, we aim to reduce our carbon footprint by 50 per cent compared with a 2005/06 baseline. This year our carbon footprint has reduced to 167,856 tonnes of carbon dioxide equivalent, a reduction of 71 per cent since 2005/06 and we have therefore achieved our emissions target early. This has been as a result of purchasing certified renewable electricity, with over 95 per cent of the electricity we use having zero emissions.

Employees – we continue to work hard to engage all of our employees in the transformation of the group's performance. Employee engagement was at 81 per cent this year, higher than the UK norm. We remain focused on 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 2018/19. We now have a total of 39 graduates and 116 apprentices across the business. Our investment in recruiting graduates and apprentices is

already benefiting the company, with 214 employees who have previously been on either the graduate or apprentice scheme having secured permanent roles across our business.

Over the last year, we have continued our sustained focus on health, safety and wellbeing. We've started our new campaign, Home Safe and Well, which includes a significant focus on employee behaviour and organisational culture in relation to Health and Wellbeing, Personal Safety and Process Safety. In 2018/19, we retained our Gold award status with the Royal Society for the Prevention of Accidents for the seventh year and our status under the UK workplace wellbeing charter. We have also won REBA awards for our work on Mental and Physical Health and been recognised by Britain's Healthiest Workplace for all the improvements we have made over the last year.

Our employee accident frequency rate for 2018/19 increased to 0.152 accidents per 100,000 hours, compared with a rate of 0.101 in 2017/18. For the same period, our contractor accident frequency rate remained the same at 0.092 per 100,000 hours. While it is disappointing that these accident frequency rates have not improved since last year, they still demonstrate an improved performance against our historical average. We recognise that there is always more to do, and health, safety and wellbeing will continue to be a significant area of focus as we strive to ensure that everyone gets home safe and well.

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 community partnership with Youth Focus North West has addressed one of our region's major issues of affordability through co-creating the 'managing your money' training module.

Key performance indicators:

Leakage – Although leakage is included within our outcome delivery incentives, we intend to continue publishing our leakage position separately, with it being an important measure from a corporate responsibility perspective. In 2018/19 we have again met our regulatory leakage target of 463 megalitres per day.

Environmental performance – On the Environment Agency's latest annual assessment, published in July 2018, we were awarded Industry Leading Company status across the range of operational metrics for the third year running. This indicates we were in joint first position among the nine water and wastewater companies assessed, and aligns with our medium-term goal of being a first quartile company on a consistent basis.

Corporate responsibility – United Utilities has a strong focus on operating in a responsible manner and is the only UK water company to have a World Class rating as measured by the Dow Jones Sustainability Index. In 2018/19, United Utilities retained its World Class rating for the 11th consecutive year.

Financial performance

Financial KPIs	Year ended 31 March 2019	Year ended 31 March 2018
Revenue	£1,798.0m	£1,716.6m
Operating profit	£624.8m	£634.2m
Profit before tax	£401.7m	£416.2m
RCV gearing	64%	64%
Interest cover	2.9	2.9

Revenue

Revenue was up £81 million, at £1,798 million, largely reflecting our allowed regulatory revenue changes.

As a result of Ofwat's annual wholesale revenue forecasting incentive mechanism (WRFIM), we have reduced revenue by £8 million in 2018/19 and will reduce revenue by a further £14 million in 2019/20 (out-turn prices). This consists of two components; firstly reflecting actual volumes being higher than our original assumptions during AMP6, and secondly reductions relating to the 2014/15 'AMP5 blind year', which are £4 million in 2018/19 and £5 million in 2019/20.

Operating profit

Reported operating profit decreased by £9 million, to £625 million. This reflects our allowed regulatory revenue changes, which have been more than offset by a £26 million increase in IRE, £24 million of other operating costs associated with the dry weather event during the year, a £16 million increase in depreciation, and a £6 million increase in employee costs associated with a one-off GMP equalisation adjustment in respect of the company's defined benefit pension schemes. The remaining cost base increased as a result of small increases in employee costs, materials, bad debts and property rates, partly offset by a credit resulting from the settlement of an historical commercial claim.

Investment income and finance expense

Reported net finance expense of £223.1 million was broadly similar to the the £218.0 million expense in 2017/18. The £5.1 million increase includes the impact of movements in fair value gains on debt and derivative instruments, from a £27.2 million gain in 2017/18 to a £7.4 million loss in the current year, offset by a £39.5 million decrease in indexation charges on index-linked debt. The remaining movements are due to smaller increases in interest payable on borrowings.

The group has fixed the substantial majority of its non index-linked debt for the 2015-20 regulatory period.

Profit before tax

Profit before tax was £401.7 million, £14.5 million lower than last year, reflecting the decrease in operating profit and the increase in net finance expense.

Tax

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. Full details of our tax policies and objectives are set out on pages 97 and 98.

In 2018/19, we paid corporation tax of £27.5 million compared with £35.5 million for 2017/18. The total tax charge for 2018/19 is £68.9 million as compared to a total charge of £77.0 million for 2017/18, the main difference being the reduction in profit before tax for the year.

In addition to corporation tax, the group pays and bears further annual economic contributions, typically of around £140 million per annum, in the form of business rates, employer's national insurance contributions, environmental taxes and other regulatory service fees such as water abstraction charges.

Cash flow

Net cash generated from operating activities for the year ended 31 March 2019 was £817.0 million, compared with £822.7 million in the previous year. This decrease mainly reflects lower cash generated from operations, offset by lower interest and corporation tax paid. The group's net capital expenditure was £614.3 million, principally in the regulated water and wastewater

investment programmes. This excludes infrastructure renewals expenditure which is treated as an operating cost under IFRS.

Net debt including derivatives and a £40.0 million loan receivable from intermediate parent undertaking was £7,465.0 million at 31 March 2019, compared with £7,165.0 million at 31 March 2018. This increase reflects accelerated regulatory capital expenditure, payments of dividends, interest and tax, and the inflationary uplift on index-linked debt, partly offset by cash generated from operations.

Fair value of debt

The group's gross borrowings at 31 March 2019 had a carrying value of £8,240.6 million. The fair value of these borrowings was £9,330.0 million. This £1,089.4 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 £1,134.4 million at 31 March 2018 due primarily to an increase in credit spreads.

Debt financing and interest rate management

Gearing, measured as group net debt divided by shadow (adjusted for actual spend) regulatory capital value, was 64 per cent at both 31 March 2019 and 31 March 2018, remaining within Ofwat's 55 per cent to 65 per cent assumed gearing range.

UUW's senior unsecured debt obligations are rated A3 from Moody's Investors Service (Moody's), A- from Standard & Poor's Ratings Services (S&P) and A- from Fitch Ratings (Fitch), all on stable outlook.

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

Cash and short-term deposits at 31 March 2019 amounted to £325.8 million. Over 2015-20 we have financing requirements totalling around £2.5 billion to cover refinancing and incremental debt, supporting our five year investment programme, and we have now raised all of this requirement.

In January 2019, UUW's financing subsidiary, United Utilities Water Finance PLC (UUWF), raised around £32 million of term funding, via the issue of HKD320 million private placement notes, with a seven-year maturity, off our EMTN programme. Also in January 2019, UUWF increased the amount outstanding on its £350 million public bond with a maturity date in February 2025 by an additional £100 million, taking the total size to £450 million. In February 2019, UUWF raised £250 million fixed rate notes in the public bond market with a 12-year maturity.

UUW remains one of the sector leaders in the issuance of CPI-linked debt having previously raised £165 million, in response to Ofwat's decision to transition away from RPI inflation linkage. In April 2019, we have increased the CPI-linkage in our debt portfolio by a further £200 million by executing a new £100 million bank loan with a 10-year maturity, and entering into inflation swaps against three existing RPI-linked bonds with a notional value of around £100 million, swapping cash flows from RPI to CPI-linkage. As both the CPI-linked loan and inflation swaps were executed subsequent to the year end, neither are included in the statement of financial position as at 31 March 2019.

Since September 2018, the group has renewed £80 million of committed bank facilities for an initial five-year term, extended a further £40 million by one year to 2024 and signed £40 million of new committed bank facilities with a five-year term. The group has sufficient headroom to cover its financing needs into late 2020.

Long-term borrowings are structured or hedged to match assets and earnings, which are largely in sterling, indexed to UK retail 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 2019, approximately 53 per cent of the group's net debt was in index-linked form, representing around 32 per cent of UUW's regulatory capital value, with an average real interest rate of 1.3 per cent. The long-term nature of this funding also 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 just under 20 years.

Our inflation hedging policy is to target around 50 per cent of net debt to be maintained in indexlinked 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 the forthcoming regulatory period around the time of the price control determination. In line with this, the group has fixed interest costs for substantially all of its floating rate exposure over the 2015–20 regulatory period, locking in an average annual interest rate of around 3.2 per cent nominal (inclusive of credit spreads).

Recognising Ofwat's intention to apply debt indexation for new debt raised during the 2020–25 regulatory period, we will retain the hedge to fix underlying interest costs on nominal debt out to ten years on a reducing balance basis, but we will no longer supplement this with the additional 'top up' hedge at the start of each 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 UUG group's €7 billion EMTN programme provides further support.

Available headroom at 31 March 2019 was £27.5 million based on cash, short-term deposits and committed bank facilities, net of short-term debt as well as committed facilities and term debt falling due within 12 months.

The group believes that it operates 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. United Utilities' cash is held in the form of short-term money market deposits with prime commercial banks.

The group operates a bilateral, rather than a syndicated, approach to its 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 2019, the group had an IAS 19 net pension surplus of £373.8 million, compared with a net pension surplus of £297.8 million at 31 March 2018. This £76.0 million increase mainly reflects the favourable impact of updating mortality assumptions and updating membership data based on the 2018 funding valuations. The scheme-specific funding basis does not suffer from volatility due to inflation and credit spread movements as it uses a fixed inflation assumption via a blend of the inflation market hedge and the inflation funding mechanism and a prudent, fixed credit spread assumption. Therefore, any inflation and credit spread movements have not had a material impact on the deficit calculated on a scheme specific funding basis or the level of deficit repair contributions.

The most recent pension scheme valuation was signed off as at 31 March 2018 and confirmed the existing schedule of contributions which aimed to eliminate the funding deficit by December 2021 for the United Utilities Pension Scheme (UUPS) and by September 2024 for the United Utilities PLC group of the Electricity Supply Pension Scheme (ESPS). As of April 2019, the group has prepaid at a discount the agreed deficit recovery contributions, resulting in a one-off contribution of £81.4 million, and has therefore eliminated any deficit on a scheme-specific funding basis. As this took place subsequent to the year end, it has had no impact on the financial statements for the year ended 31 March 2019.

Further detail on pensions is provided in notes 14 and A6 ('Retirement benefit surplus') of these financial statements.

Our risk management

Principal risks and uncertainties

Our management of risk underpins the delivery of our purpose and strategy and enables us to focus on providing a sustainable and resilient service for all customers and stakeholders for years to come

In delivering our group-wide activity we are faced with a range of risks which can threaten the quality of the services we provide, introduce delays and ultimately increase cost and damage the reputation of the group. We anticipate and mitigate these risks through an embedded risk management framework which includes:

- A consistent and reliable enterprise-wide risk management process;
- A governance and reporting structure which enables the board to oversee and direct the control of risk;
- Definition of risk appetite by the board with an overarching general risk appetite supplemented where appropriate by specific risk appetites for certain risks;
- An ISO 31000:2018 aligned assessment and mitigation process; and
- Policies, practical guidance and training programmes to enable our people to identify, quantify and manage risk effectively.

Our risk identification and management activities are continuous and ongoing, with each functional area responsible for assessing, articulating and controlling relevant risks.

Figure 1: Assessment and management process adapted from ISO 31000:2018



This includes horizon scanning of the internal and external business environment, to identify and review new and emerging risks that could lead to a future impact or emerging circumstances of existing risk that could affect the exposure in the short to medium term.

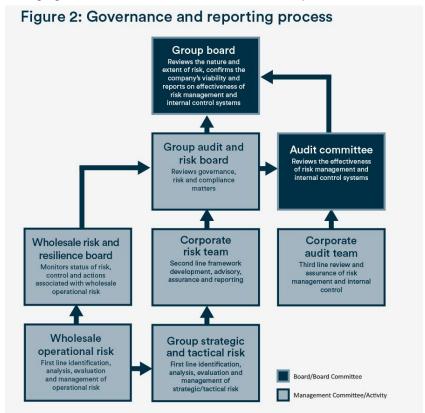
Risk events are assessed in their current state for the likelihood of occurrence based on the level of threat and the vulnerability of controls, together with the financial and reputational impacts should the identified events materialise. Where we are not satisfied that the current state is consistent with our general risk appetite, or where it could present an unacceptable risk in relation to a specific risk appetite, we determine an appropriate risk exposure as a target state and develop further mitigating controls to deliver this position within an appropriate time frame.

In order to maintain adequate oversight of risk, there are various steering groups and governance forums that focus on individual risks which then escalate and share progress to the group audit and risk board either directly or via the wholesale risk and resilience board.

A complete oversight of our enterprise-wide profile is presented every six months to the group board to highlight the nature and extent of the current risk exposure with focus on the most significant risks relative to the group's principal risks.

We categorise the nature of our principal risks to cover potential issues within the following four categories: Regulatory and legal; Core operations and service provision; Functional service and support; and Hazard-based.

Reports to the board highlight major risks based on the highest impact business risks across the group and wholesale operational risks. These comprise the ten highest scoring risks assessed on the basis of likelihood and financial impact for each of the two categories. In addition, the report covers risks which were scored highly for the severity of their impacts in their current state (net of control effectiveness) but remote on likelihood. The board report also highlights risks where there could be significant reputational impact or which relate to significant new or emerging risks or issues, but which are not encompassed within the other reported categories.



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

Ofwat's Initial Assessment of Plans (IAP) following the price review submission recognised our leading approach to risk and resilience. Our approach is a combination of top-down assessment, where we consider the impacts on strategic delivery, and bottom-up where we consider localised operational performance, asset health and operational hazards. We have an established approach for the two elements, but continue to drive improved maturity through various initiatives which focus on improved appreciation of related data and information to understand our long-term risk profile, to support decision-making and to deliver a cost-effective and proportionate risk management response which drives resilience.

These initiatives include:

- Continuation of our focus on cross-business consideration of strategic and tactical risks, for example an in-depth cyber risk assessment that took place throughout the year and Brexit contingency planning;
- Improvement of our maturity in relation to risk appetite we have commenced reporting against a general risk appetite boundary and, where appropriate, specific risk appetite boundaries enabling more targeted discussions over the last year (an approach we intend to continue to develop and embed);
- Development of the assessment and reporting of the full distribution of impacts, including
 possible maximum and minimum outcomes as well as more likely occurrences. This supports
 our focus on long-term resilience and tests our response and recovery plans and
 expectations;
- Ongoing development of our wholesale risk and asset planning process to prioritise investment and operational management through the identification of risks and issues and monitoring of strategic performance requirements; and
- An assurance-based strategy within the engineering and programme management team introducing programme and portfolio risk responsibilities and improving capability by focusing on reliable risk information, ownership and learning from risk events.

Profile features

Our risk profile, which currently consists of around 100 event-based risks is enterprise-wide, covering risk across the entire group and considering both internal and external drivers. By their nature, these risks will include many combinations of high to low likelihood and high to low impact.

Political and regulatory risk and uncertainty feature prominently within the profile, notably with the outcome of PR19 being delivered this calendar year. The possibility of 'renationalisation' is a key area of uncertainty as is the opening up to competition of wholesale operations (including the current focus on possible competition in bioresources and water abstraction) and the potential for competition covering domestic retail activities.

Our operations continue to be substantially UK-based, but the potential impacts of Brexit remain under review and have been reported to the group board. In common with other UK companies, a significant issue is the uncertainty surrounding the effects of any Brexit deal that the UK Government may ultimately deliver. Our review has considered the availability of European funding, the availability of critical goods (including chemicals and spare parts) through our supply chain, the price of goods and services due to tariff changes, exchange rate changes and potential inflationary shifts outside current predicted parameters, the effect to the labour resource of both the company and our delivery partners and our ability to collect cash were there to be an economic downturn. For each of these consequences, the impact assessment considers a range of possible impact scenarios and we have developed a contingency plan (in

collaboration with Water UK) which has involved discussing the implications of Brexit with our key suppliers and capital delivery partners, as well as considering mitigation measures such as stockpiling and using alternative suppliers, a large proportion of which is already built into our multi-party frameworks.

Following the launch of non-household retail competition in April 2017, we have continued to monitor our operations in the market to review compliance risks and to ensure that we continue to operate in a manner that complements and promotes the 'level playing field'.

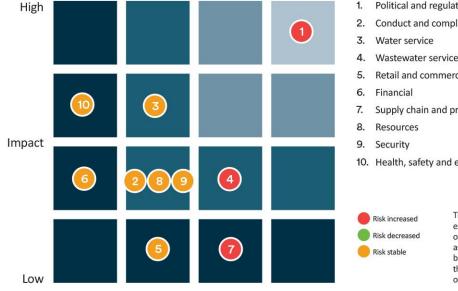
From an operational risk perspective, the dominance of the penalty element of Ofwat's outcome delivery incentive mechanism and the continuing effects of changes to the Environmental Sentencing Guidelines continue to be key features of evolving exposure. Reputationally, our core operations/service provision (notably water service) and health, safety and environmental risks have the highest focus for monitoring and reviewing control effectiveness based on the potential impact should the risk event occur.

We continue to adapt to and plan for climate change and its significant and permanent impacts on the water cycle, our operations and the broader operating environment. This includes consideration of the long-term viability of water and wastewater services such as water abstraction, drinking water supply and treatment capability, drainage and sewer capacity, wastewater treatment and its discharge efficiency and effectiveness. The recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) support and reinforce the need to consider climate-related risks and uncertainties. These continue to be factored into risk management and the likely effects of future changes are a critical consideration in our long and medium-term risk, operational and financial planning (see also Key resources on pages 19 to 25 and Our approach to resilience on pages 47 and 48). Our water service and wastewater service risks (summarised on pages 67 and 68) also reflect current key risks including the potential for extreme weather and climate change.

High

Figure 3: Risk map

Low



Likelihood

- Political and regulatory
- Conduct and compliance risk
- Retail and commercial
- Supply chain and programme delivery
- 10. Health, safety and environmental

The risk map provides an indicative only view of the current exposure of each of the principal risks relative to each other: illustrating the likelihood of occurrence relative to the associated internal or external drivers; whether the risk is believed to have increased, decreased or remained stable over the last 12 months; and the most likely impact should an event

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.

Principal risks

The ten principal risks (combinations of relevant event-based risks) identified in the risk map and described in more detail below, illustrate where value can be lost or gained and could have a material impact on the group's business model, future performance, solvency or liquidity. For each principal risk the nature and the extent of exposure is recorded, with alignment to our strategic themes and mitigating controls identified. Also described are key risks worthy of note, together with current issues and areas of uncertainty. These reflect changing/emerging circumstances which could affect the risk exposure of future activities and are therefore considered as part of the ongoing mitigation.

Regulatory and legal

(1) Political and regulatory risks (increased)

Potential change in the political and regulatory environment and/or frameworks

Main strategic theme:

At the lowest sustainable cost

Principal/significant impacts:

Potential for increased costs of administration, reduction in income, margin and greater uncertainty of returns.

Potential that reduced confidence among equity investors and difficult debt market conditions lead to funding pressures in the context of raising finance and refinancing debt on an ongoing basis.

In the event of renationalisation the business could be acquired below fair value.

Management and mitigation:

We regularly engage in relevant government and regulatory consultations which may affect policy and regulation in our industry as well as consulting with the opposition. We also consult our customers to better understand their requirements and proactively consider opportunities and threats associated with any potential change, exploiting opportunities and mitigating risks where appropriate. We keep customers and the public informed. We also provide information to the government, regulators, customers and the public as appropriate to help them to make informed decisions.

Current key risks, issues and uncertainties:

- Potential renationalisation of the water sector
- Further market reform including upstream competition in water resources and bioresources, as well as additional markets in future, and the potential for the introduction of domestic competition
- Final determination of PR19 and associated tougher regulatory targets
- Brexit and potential changes to the regulatory regime

(2) Conduct and compliance risk (stable)

The failure to meet all legal and regulatory obligations and responsibilities

Main strategic theme:

In a responsible manner

Principal/significant impacts:

The detrimental impact to customers and other stakeholders through inappropriate culture, behaviour or decisions and the potential to receive penalties of up to 10 per cent of relevant turnover and ultimately revocation of our licence or the appointment of a special administrator.

Management and mitigation:

Corporate social responsibility features prominently within the group. We work in collaboration with landowners, environmental organisations, community groups and other stakeholders to deliver enhanced environmental outcomes and engage with the community and support agencies regarding vulnerable customers and ensure diversity and equality of employees and an ethical supply chain.

Legislative and regulatory developments are continually monitored as is the governance framework utilised by the group. Risk-based training of employees is undertaken and we participate in consultations to influence legislative and regulatory developments. Allowance for any material additional compliance costs in the regulated business is sought as part of the price determination process. The group also robustly defends litigation where appropriate and seeks to minimise its exposure by establishing provisions and seeking recovery wherever possible.

Current key risks, issues and uncertainties:

- The effects of Brexit on legislation/laws, enforcement and the regulatory regime
- Competition law requirements in relation to the non-household retail market and other competitive markets
- Current material litigation
- Continuing high fines for environmental offences
- Data management and governance (GDPR)

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:

The potential for public health issues associated with poor water quality.

The potential for supply interruptions that could affect large populations within the region for long durations.

Management and mitigation:

Mitigation is provided through core business processes, including centralised planning and control, quality assurance procedures, risk assessments and rigorous sampling/testing regimes.

Optimisation of operational and maintenance tasks together with targeted capital interventions help to ensure services to customers are maintained.

Our 25-year Water Resources Management Plan defines our strategy to achieve a long-term, best-value and sustainable plan for water supplies in the North West including consideration of multiple different climate change scenarios including a 2 degree (Celsius) global warming scenario (assessing systems resilience).

We continue to develop innovative solutions and invest in resilience to further support the delivery of water and wastewater services in the long term.

Current key risks, issues and uncertainties:

- Population growth
- Extreme weather, climate change and drought
- Expected change to the abstraction licensing regime
- Drinking water safety and security
- Critical asset failure
- Brexit, in particular the effects of a no-deal scenario on the chemicals supply chain

(4) Wastewater service risk (increased)

A failure to remove and treat wastewater

Main strategic theme:

The best service to customers

Principal/significant impacts:

The potential for sewer flooding or serious pollution to air, soil or water leading to harm or disruption to the public, businesses and the environment (wildlife, fish and natural habitats) resulting in fines and reputational damage.

Management and mitigation:

Mitigation is provided through core business processes, including centralised planning and control, quality assurance procedures, risk assessments, rigorous sampling/testing regimes and close management of discharge consent requirements. Optimisation of operational and maintenance tasks together with targeted capital interventions help to ensure services to customers are maintained.

Current key risks, issues and uncertainties:

- The effects of extreme weather on overloading the sewer network
- Pollution incidents
- Population growth
- Increased regulatory scrutiny and penalties
- Higher fine levels for environmental offences
- Climate change
- Brexit, in particular the effects of a no-deal scenario on the chemicals supply chain

(5) Retail and commercial risk (stable)

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:

The potential for significant losses, regulatory penalties and long-term reputational damage associated with poor customer satisfaction. The potential for a significant increase in the bad debt charge, reducing profitability.

Management and mitigation:

For domestic retail there is a wide range of initiatives and activities focused on improving customer satisfaction, including proactive incident communication, complaints handling and use of appropriate tariffs. 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 to better understand customers' circumstances to determine the most appropriate collection and support activities. Our 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:

- Socio-economic deprivation in the North West
- Economic downturn (due to welfare reform, Brexit or other factor) and the effect on domestic bad debt
- Competition in the water and wastewater market and competitor positioning
- Non-household retail competition and the ability to treat other participants equally
- The challenges associated with being involved in a joint venture water retail business operating in a competitive environment

Functional service and support

(6) Financial risk (stable)

Potential inability to finance the business appropriately

Main strategic theme:

At the lowest sustainable cost

Principal/significant impacts:

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).

Tax inefficiencies, under or overpayment of tax, market fluctuations in inflation, 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:

Refinancing 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 also 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:

- Inflation/deflation
- Financial market conditions, interest rates and funding costs due to economic uncertainty (e.g. Brexit)
- Paying an appropriate amount of tax

(7) Supply chain and programme delivery (increased)

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 resulting in an impact at future price reviews, negative reputational impact with customers and regulators.

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 programmes 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 structure and arrangement in AMP 7
- Direct procurement for customers (DPC)
- Technical quality and innovation
- Brexit and increased uncertainty of availability of materials sourced from Europe

(8) Resources risk (stable)

Failing to provide appropriate resources (human, technological or physical resource) 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 ineffective non resilient business activity.

Management and mitigation:

Developing our people with the right skills and knowledge, combined with delivering effective technology are important enablers to support the business to meet 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.

Current key risks, issues and uncertainties:

- Delivering required employee engagement
- Personal development, talent management and succession planning
- 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.

The potential for catastrophic damage to UU 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 (DWI) 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 new 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 also maintain insurance cover for loss and liability, and the 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:

- Cyber crime
- Terrorism
- Fraud
- Ownership of critical national infrastructure and national infrastructure

Strategic report

(10) Health, safety and environmental (stable)

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

Main strategic theme:

In a responsible manner

Principal/significant impacts:

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.

The potential for serious impact on wildlife, fish or natural habitats resulting in significant fines and reputational damage.

Management and mitigation:

Supported by strong governance and management systems certified to OHSAS 18001 we have developed a strong health and safety culture where 'nothing we do at United Utilities is worth getting hurt for'. 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 emissions by designing out waste from our operations, generating our own energy and looking at ways to reduce our use of raw materials. We also 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:

- 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
- Fluvial and coastal flooding associated with climate change

Emerging risks and issues

We monitor the internal and external business environment, to identify and review new and emerging risks to our strategy or operations and emerging circumstances of existing risk that could affect our risk exposure in the short to medium term. If new and emerging risks or circumstances are too far into the future or we lack sufficient detail to make a reliable quantification, they are summarised as a watching brief and reported to the corporate responsibility committee and to the board in the six-monthly reporting cycle.

Some new and emerging risks of note are listed below, with emerging circumstances of existing risk included within the list of current key risks, issues and uncertainties in the principal risks section on pages 66 to 72.

Strategic report

	Strategic	
Emerging risk/issue	theme	Description
Climate change	The best service to customers	While not new as a risk/issue, climate change is an ever emerging risk in terms of understanding the extent of extreme weather and the return frequency of such events. As an organisation responsible for essential services and infrastructure, we are required under the Climate Change Act 2008 to prepare for a changing climate and understand and consider how we intend to manage material risks to which climate change contributes including:
		More frequent and/or higher magnitude drought events in summer;
		Higher rainfall in winter; and
		More occurrences of heavy rainfall.
Water scarcity	In a responsible manner	The Environment Agency has warned of water supply shortages in England by 2050. In particular, London's demand is expected to exceed supply in the next decade due to relatively low rainfall, growing population and drier summers. United Utilities has been proactive in the opportunity for the strategic transfer of water from the North West to the South East of England, incorporating an option in the 2019 Water Resources Management Plan (WRMP) for onward transfer in the 2030s. While this is an opportunity, it also brings a number of service, commercial and reputational risks which we will continue to consider, monitor and manage.
Plastics	In a responsible manner	There is currently considerable attention on single-use plastics and microplastic pollution. The water industry has a role to play in understanding how this material gets into the water environment and this may present potential operational and reputational risks. We will continue to keep a watching brief on the situation and are involved in research projects to better understand any risks to human health or the environment regarding this, and will continue to monitor developments carefully.
Biosolids	At the lowest sustainable cost	Biosolids to agriculture is currently recognised by the government as the best practicable environmental option, but other jurisdictions adopt different approaches to biosolids disposal creating a potential risk that this could extend to the UK in the long term. We do not currently expect any change in this regard but will continue to keep a watching brief on the situation, noting that several research projects are underway to understand these risks and identify solutions.

The strategic report was approved by the board on 12 June 2019 and signed on its behalf by:

Russ Houlden

Chief Financial Officer

Introduction from Dr John McAdam, Chairman:

Our year

We have reported strong financial performance and sustained our improvement in operational performance contributing towards achieving our strategic targets during 2018/19. Our 2020–25 draft business plan for UUW was awarded fast-track status in Ofwat's initial assessment. Our plan reflects our strategy of providing the best service to customers, at the lowest sustainable cost and in a responsible manner, and in accordance with our core values. Ofwat commended our plan in a number of areas, including customer engagement, affordability and vulnerability, resilience and innovation. We believe our plan demonstrates the regard the board has for our various stakeholder groups in its decision-making. Our plan is designed to promote the group's long-term success and customers' interests as well as creating value for shareholders.

During the year, we have also had our challenges. In particular, the prolonged hot and dry weather last summer, resulting in exceptional demand from customers impacted many areas of our operations.

Our approach

Our role as the board is to set the strategy of the group and ensure that management operates the business in accordance with this strategy. Details of the strategy and purpose are set out in the strategic report (see page 10). We believe this approach will promote the group's long term success, customers' interest, create value for shareholders and take account of our other stakeholders. The board's intention is to hand over the business to our successors in a better and more sustainable position for the future. Within our region, our activities often have multiple touch points on individuals' lives. United Utilities is a monopoly supplier of water and wastewater services to domestic households. Many customers are also our shareholders, either directly or indirectly holding shares through pension scheme investments. Indeed, many of our employees are also customers, shareholders and future pensioners and have an interest in the group's long-term success. As individual directors we are mindful of our statutory duty to act in the way each of us considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, as set out in s172 of the Companies Act 2006 (the Act). There are times when difficult decisions must be taken requiring each of us to exercise independent judgement and apply reasonable care, skill and diligence in the decision-making process. As the board of directors, we recognise our responsibilities to our different, but mainly inter-related stakeholder groups and our wider societal responsibilities. For the first time this year, we have included, as required by s414CZA of the Act, a s172(1) Statement (see pages 104 and 105).

Our people

At 31 March 2019, we had maintained our gender target that at least 25 per cent of the board comprised of women with, three out of ten directors on the board being women. The board aspires to achieve 33 per cent by 2020. Our current gender balance places UUG 33rd in the FTSE 100 in the '2018 Hampton Alexander Women on Boards Leadership Index'. With regards to diversity more generally, I am satisfied that we have an appropriately diverse board in terms of experience, skills and personal attributes and in terms of age and ethnicity among our board members.

As directors, we have many years, both individually and collectively of experience gained across a variety of industries and regulated businesses, and so are familiar with the particular challenges of a regulated operating environment. Although there are time constraints for non-executive directors who also have an executive role, these individuals bring valuable current market experience and thinking to the board table. Similarly, we encourage our executive directors to serve as non-executive directors elsewhere to help broaden their experience, although this is normally limited to one other directorship in a company in an industry which does not conflict with United Utilities' business.

Twenty-nine per cent of our executive team is made up of women. We are keen to develop our succession pipeline of female senior managers so that, over time, they can be considered for executive board appointments or as potential candidates for non-executive directorships in other companies. Our current talent programme at a senior level is well embedded and we believe a non-executive appointment for senior managers provides an excellent opportunity for both personal and career development. It is a way of gaining valuable experience that may be applied at United Utilities so long as no conflicts of interest occur. Our graduate and apprentice programmes are thriving and we are focusing more effectively on middle/junior management succession.

Our gender pay data can be found on our website at unitedutilities.com/corporate/responsibility/employees/diversity/. Historically, our industry has been male dominated, but we have measures in place to increase diversity in broad terms, including gender among our employees.

Our values and culture

Our aim is to behave as a responsible business, and our business principles can be found on our website. Our core values of acting with integrity and focusing on our customers provide both the framework for our business culture and the way in which our employees go about their daily work. Behaving responsibly has been part of the United Utilities ethos for many years.

Our approach to risk

Our approach toward risk is very much aligned with our culture. We are an organisation that provides a vital service to its customers and we recognise the responsibilities of this, and our intention is to act responsibly towards our stakeholders, in particular our customers, in the provision of our services to them. As a board, we must take long-term decisions to ensure our successors are able to operate the business efficiently for customers, and we need to build our assets to meet future demand and circumstances. We are a commercial organisation operating within a regulated framework and accepting some level of risk is a normal consequence of doing business. It is the board and the executive team's role to understand the risks associated with each activity of the business and ensure that actions are taken to mitigate these risks.

Looking forward

Having served on the board for over 11 years, and as the company is preparing for the start of its new regulatory period in April 2020, I felt now was a good time for me to hand over the reins, and I will leave the board on 31 December 2019. On 13 May 2019 the appointment of Sir David Higgins as an independent non-executive director and chairman designate was announced. I am grateful to Mark Clare, and his fellow independent non-executive directors, who led a thorough search process, identifying Sir David as my successor. Sir David is an excellent appointment, his approach and experience will fit well with the culture at United Utilities. I have very much enjoyed my time as a member of the board and am confident that the company is well placed as it goes into the 2020–25 asset management period.

Dr John McAdam

Chairman

Code principle: Leadership

The 2016 UK Corporate Governance Code

UUW, as required by its licence, has 'had regard to' the UK Corporate Governance Code ('the Code' since 2008. The version, applicable to the company for the year ended 31 March 2019, was published by the Financial Reporting Council in 2016, a copy of which can be found at https://www.frc.org.uk/getattachment/ca7e94c4-b9a9-49e2-a824-ad76a322873c/UK-Corporate-Governance-Code-April-2016.pdf. The company, in agreement with Ofwat, operates a structure that allows directors to be members of the boards of both the company and its ultimate holding company, UUG, in order to increase the efficiency and effectiveness of the corporate governance structure. These arrangements have been in place since March 2011 and were in place throughout the year ended 31 March 2019.

The boards of both UUG and UUW fully support Ofwat's drive for the highest standards of board leadership, transparency and governance in the industry, and are fully cognisant of the long-term nature of the industry and the stewardship of water and wastewater assets for future generations of customers. We are satisfied that current practices and the application of the Code at both holding company and regulated company levels are entirely consistent with the Ofwat principles on board leadership, transparency and governance published by Ofwat in 2014 (see table below). Ofwat's revised its board leadership, transparency and governance principles in January 2019, and which apply to companies with effect from 1 April 2019, will be reported against for the year ended 31 March 2020.

As a listed company and the ultimate holding company of UUW, UUG complied with the main and subsidiary principles and provisions of the 2016 Code, and did so fully for the year ended 31 March 2019. During the year, the UUW board also complied with the 2016 Code, the only exception being, that UUW does not duplicate the board committees already operating at the UUG level, as UUW represents 98 per cent of UUG group revenues. The activities of the principal UUG board committees as required by the Code (whose members are made up entirely of independent non-executive directors), are necessarily targeted towards UUW related matters, thus ensuring that the interests of UUW and its customers are safeguarded. An explanation of how the UUG board committees complied with the provisions of the 2016 Code during the year ended 31 March 2019 can be found on pages 84 to 143 of the UUG 2019 annual report.

Board meetings of UUG and UUW are kept entirely separate, although normally held on the same day, thus ensuring that the board of each company takes decisions relating to and in the context of the entity in question. Any decisions of a regulatory nature are the responsibility of the UUW board.

Compliance with Ofwat's regulated company principles on board leadership, transparency and governance applicable to the year ended 31 March 2019

Ofwat Regulated Company Principles 2014	Our response	
Transparency – reporting must meet or exceed the standards set out in the Disclosure Guidance and Transparency Rules of the UK Listing Authority	This corporate governance report, incorporated by reference into the Directors' Report, meets the requirements of the Disclosure Guidance and Transparency Rules of the UK Listing Authority. Our Remuneration Report is included on pages 94 to 96.	
The regulated company must act as if it is a separate public listed company An effective Board is fully focused on the regulated company's obligations	UUW represents 98 per cent of UUG revenues. The UUW Board (whose directors' biographies can be found on pages 88 to 93, and which includes a strong independent representation with a diverse range of backgrounds and experience) is fully focused	

	on meeting the company's regulated obligations and activities as an appointee in accordance with its Licence as a provider of water and wastewater services*. The UUW board is responsible for the decisions it takes, is advised by the director of strategy and regulation and the company secretary, and can seek independent advice on any matter it sees fit.
There must be significant independent representation on the Board Independent non-executive directors are essential to securing strong Board leadership and governance In line with best practice, boards should have the appropriate balance of skills, experience, independence and knowledge of the company	Directors' biographies can be found on pages 88 to 93. Seven out of the eleven directors (including Sir David Higgins) fulfil the independence criteria of the UK Corporate Governance Code with which a listed company is required to comply (or explain its reasons for not complying) and the Chairman, on appointment as Chair of the UUG Board, fulfilled the Code's independence criteria. Information on succession planning and the appointment process for directors can be found in the 2019 UUG annual report in the report of the Nomination committee on pages 94 to 102. The outcome of the annual board evaluation can be found on pages 90 to 92 of
The Chair must be independent of management and investors	the 2019 UUG annual report. The biography of the Chairman can be found on page 88. In Dr McAdam the board has an experienced leader. He shares with the group his experience of other governance practices gained throughout his career. He is an effective chair of board meetings who is meticulous in his preparation and planning of all aspects of board meetings.
	Dr McAdam has not declared any interests which conflict with the business of UUW, nor UUG. The role of Chairman and CEO are separate. Dr McAdam will step down from the board on 31 December 2019, when Sir David Higgins who met the independence criteria in the Code on his appointment, will succeed him as Chairman of the company.
Board committees, including but not limited to audit and remuneration committees, will operate at the regulated company level There should be a majority of independent members on the audit and remuneration committees	As agreed with Ofwat in 2010, UUW does not duplicate board committees already in operation at the UUG level. This is because UUW represents in excess of 98 per cent of the UUG group's revenues. Therefore the activities of the principal UUG board committees as required by the Code (whose members are made up entirely of independent non-executive directors) and who are also independent non-executive directors of UUW, are necessarily targeted towards UUW matters, thus ensuring that the interests of UUW and its customers are safeguarded. Details of attendance at the

	UUG committee meetings can be found on page 90 of the 2019 UUG annual report.
The group structure must be explained in a way that is clear and simple to understand.	The group structure is shown on page 87.

^{*}United Utilities Water Limited is regulated under the Water Industry Act 1991, the Water Act 2003, the Water Act 2014 and its Conditions of Appointment ('Licence').

The board of directors

The biographical details of our directors are given on pages 88 to 93. The directors who served during the year and their attendance at scheduled board meetings during the year ended 31 March 2019 are set out in the table below. Figures show the actual number of meetings attended compared to the maximum number of scheduled meetings held during the year (eight). There were a number of other board meetings held, as the need arose, which directors attended either in person or via telephone conferencing facilities

All the non-executive directors are independent in accordance with the Code, and the Chairman met the Code's independence criteria at the time of his appointment as Chair of the UUG board. Board succession is kept continually under review. As part of our board succession plans, the appointment of Sir David Higgins as a new independent non-executive director was announced on 13 May 2019. The company was compliant with the Ofwat licence obligation for there to be three independent non-executive directors serving on the board.

		Attendance at board meetings
Dr John McAdam	Chairman	8(8)
Steve Mogford	CEO	8(8)
Russ Houlden	CFO	8(8)
Steve Fraser	COO	8(8)
Stephen Carter ⁽¹⁾	Independent non-executive director	7(8)
Mark Clare	Independent non-executive director	8(8)
Alison Goligher	Independent non-executive director	8(8)
Brian May	Independent non-executive director	8(8)
Paulette Rowe	Independent non-executive director	8(8)
Sara Weller ⁽²⁾	Independent non-executive director	7(8)

⁽¹⁾ Stephen Carter was unable to attend a meeting of the board due to a conflicting commitment.

Overview of the board's responsibilities

The board members are fully aware of their responsibilities, both individually and collectively, to promote the long-term success of the company and of the company's responsibilities as the regulated licence holder. The board is responsible for ensuring that the company is managed in accordance with its licensed responsibilities and delivering good customer service whilst having regard to other stakeholder interests. Consideration of the long-term interests of shareholders and bondholders, together with those of the wider interests of stakeholders represented by customers, employees, suppliers, the community, the environment and regulators are factored into the company's management processes.

⁽²⁾ Sara Weller was unable to attend a meeting of the board due to unforeseen circumstances.

The board is responsible for the assessment and management of the key issues and risks impacting the business. Accordingly, the board sets the company's overall direction, reviews management performance and reviews the company's approach to business planning, risk management and development of policies including health and safety.

The board has delegated specific responsibilities to the UUW capital investment committee to consider and approve expenditure and investment proposals within limits determined by the board and the internal control manual. The committee's members are the chief executive officer, the chief financial officer, and the chief operating officer together with other members of the senior management team. Any projects in excess of £50 million are approved by the UUW board.

Additionally, the UUG board has oversight of any project in excess of £150 million and any project which materially increases the group's risk profile. The UUG board has a schedule of matters reserved for its own decision, a copy of which can be found on the United Utilities website at *unitedutilities.com/corporate-governance*. There are no specific matters relating to the operation of the regulated activities of UUW that are included therein.

The UUW board delegates certain treasury matters to the chief financial officer and/or treasurer. However, any decisions taken are reported to the UUW board, which has ultimate oversight and control.

UUW board activity in 2018/19

Customer

Regular monitoring and review of the planning process for PR19 business plan including:

- Review and discussion of the assurance activities for the PR19 plan, both internal and external assurance and the approval of the board assurance statement along with the PR14 reconciliation submission and board assurance statement:
- Reviewed and approved the PR19 viability statement extending to March 2025; and
- Approved the PR19 business plan and its submission to Ofwat on 3 September 2018.
- Considered and approved the publication and submission to Ofwat of 2019/20 charges for wholesale water, wholesale wastewater and household and new connections services;
- Reviewed updates on the service incentive mechanism, social tariffs, help to pay scheme and the customer experience programme and in particular noting new initiatives for customers in vulnerable circumstances;
- Regular review and monitoring of the company's operational response and performance in relation to the 2018 extreme weather events, particularly in relation to water resources and the dry weather event and temporary use ban;
- Met with representatives of YourVoice, the company's customer challenge group, discussing the ongoing work with the company, YourVoice's assurance on the 2018 annual performance report and its contribution to the PR19 business plan;
- Reviewed and discussed developments in cyber crime and the activities undertaken to enhance the effectiveness of the company' security controls.

Business as usual

- Received updates on the Security and Emergency Measures Directive;
- Approved a number of projects that were above delegated limits and which required the board's approval including capital works at Eccles wastewater treatment works;

- Regular updates and discussion of the progress of the Manchester and Pennines long-term resilience project;
- Received an annual briefing on dam and reservoir safety and the company's risk based approach;
- Reviewed monthly updates on health and safety performance and the annual health and safety report and an update on the progress of developing and implementing an improved health and safety culture within the business 'home safe and well':
- Discussed the results of the annual employee voice and engagement survey and a general employee and people update;
- Reviewed the underlying strategy and approved the award of framework agreements for network maintenance services; and
- Reviewed current and future trends in wholesale asset replacement and asset lives.

Regulatory

- Considered and discussed the independent assurance supporting the 2018 annual performance report, including the risk and compliance statement and the board statement which were approved for submission to Ofwat and publication;
- Received quarterly updates and the annual report on UUW's DWI water quality performance;
- Received updates on the Environment Agency's performance assessment;
- Regular monitoring and review of the 2019 Water Resource Management Plan and approval of its submission to Defra:
- Reviewed and noted the progress of actions against the DWI Notice in relation to the 2015 Lancashire water quality incident;
- Reviewed and accepted modifications to Licence Conditions; and
- Reviewed and discussed communications received from Ofwat.

Governance

- Renewed powers of attorney to senior managers in relation to treasury and property related matters;
- Readopted the company's governance Code for the year ended 31 March 2019 and reviewed the Ofwat revised board leadership, transparency and governance principles effective from 1 April 2019;
- Approved the appointment of Sir David Higgins as an independent non-executive director and Chairman designate with effect from 13 May 2019; and
- Reviewed and approved the slavery and human trafficking statement.

Financial

- Reviewed and approved UUW's proposed treasury activities for 2018/19;
- Approved the payment of interim dividends;
- Approved the company's annual report and financial statements;
- Reviewed and approved the going concern and long-term viability statement;

- Reviewed discussed and approved proposals in relation to pensions in general and specifically approved the proposals in principle relating to actuarial valuations of the United Utilities Pension Scheme and the United Utilities PLC Group of the Electricity Supply Pension Scheme;
- Received regular updates on cash collection, SIM scores, ODI performance and cost adjustment claims;
- Approved the renewal of working capital arrangements with Water Plus Group Limited, the company's joint venture with Severn Trent; and
- Reviewed the company's preparations in relation to Brexit.

Conflicts of interest

Since 1 October 2008, all directors have been under a statutory duty to avoid any situation in which they have, or can have, a direct or indirect interest which conflicts or possibly may conflict with the interests of the company. As is permitted, the company's articles of association contain provisions which permit the unconflicted directors to authorise conflict situations and procedures have been put in place for the disclosure of any conflicts by the directors to the board and for the consideration and, if appropriate, authorisation of such conflicts. The procedures permit any authorisation to be subject to any terms and/or conditions that the unconflicted directors think fit. All directors are asked on an annual basis if their other commitments and interests have changed and a brief report to the board is prepared. In any case, all the directors are required to notify the Chairman and/or company secretary if they believe a conflict situation might arise. Any potential issue of conflict relating to prospective directors would be addressed by the board.

The directors are at all times fully mindful of the fact that they hold a directorship in both UUW and UUG. Steve Mogford and Russ Houlden have each declared their directorship of Water Plus Limited as being a potential conflict of interest with the company. UUW and Water Plus Group Limited are, and operate as, distinct legal entities.

Reappointment of directors

Directors seek annual reappointment at the UUG AGM, in accordance with the Code, directors' appointment or removal would also be subject to the provisions contained within the company's articles of association. A separate UUW nomination committee is not felt to be necessary, as the succession planning needs of the board are dealt with by the UUG nomination committee as the interests of the two boards are aligned and given that UUW represents 98 per cent of the UUG group's revenues.

Information, support and advice

Board papers are generally distributed electronically five days in advance of scheduled board meetings to enable directors to obtain a thorough understanding of the matters to be discussed, and seek clarification, if required. All directors have access to the advice and services of the company secretary and his team, who are responsible to the board for ensuring that board procedures are complied with. The appointment and removal of the company secretary are matters reserved to the UUG board. The board has access, through the company secretary, to independent professional advice at the company's expense where they judge it necessary to discharge their responsibilities as directors. The company also maintains an appropriate level of directors' and officers' insurance.

Code principle: Effectiveness

Induction and training

An induction programme is devised for each new non-executive director. It would include one-toone meetings with the Chairman and each of the existing non-executive directors. They will have one-to-one meetings with the CEO, CFO, COO and the company secretary along with other members of the executive team. They will also meet members of the operational teams and visit

some of the key operational sites and capital projects to ensure they get a first-hand understanding of the water and wastewater business. New directors receive a briefing on the key duties of being a director of a regulated water company, including the role of the regulated company's holding company, and they will also meet with the director of regulation and representatives of Ofwat.

Board evaluation

This year's evaluation was conducted by the company secretary and his team. Given that there is a high degree of overlap (and common board membership) between the UUW and UUG boards, the board evaluation posed questions that were relevant to both boards. (For further details see pages 90 to 92 of the UUG 2019 annual report).

Code principle: Accountability

Board's approach to risk management and internal control

The board discharges its responsibility for determining the nature and extent of the risks that it is willing to take to achieve its strategic objectives through the risk appetite framework. Sitting alongside the risk management framework, risk appetite captures on an annual basis the board's desire to take and manage risk relative to the company's obligations, stakeholder interests and the capacity and capability of our key resources.

The board is also responsible for ensuring that the company's risk management and internal control systems are effectively managed across the business and that they receive an appropriate level of scrutiny and board time. The group's/company's risks predominately reflect those of all regulated water and wastewater companies. These generally relate to the failing of regulatory performance targets or failing to fulfil our obligations in any five-year planning cycle, potentially leading to the imposition of fines and penalties in addition to reputational damage. Political risk is also closely monitored.

The board, concluded that it was appropriate to adopt the going concern basis of accounting and that it was appropriate to provide the long-term viability statement for the company (as set out on page 83).

Assurance supporting these statements was provided by the review of: the group's key financial measures and contingent liabilities; the key credit financial ratios; the group's liquidity and ongoing ability to meet its financial covenants.

As part of the assurance process, the board also took into account the principal risks and uncertainties facing the company, and the actions taken to mitigate those risks. These principal risks and uncertainties are detailed on pages 72 to 75 of the UUG 2019 annual report, as are the risk management processes and structures used to monitor and manage them. Biannually, the UUG board receives a report detailing management's assessment of the most significant risks facing the company. The report gives an indication of the level of exposure, subject to the mitigating controls in place, for the risk profile of the group. This provides the board with information in two categories – group wide business risks and wholesale operational risks. The UUG board also receives information during the year from the UUG treasury committee (to which the board has delegated matters of a treasury nature – see the structure diagram on page 87 of the UUG 2019 annual report) including such matters as liquidity policy, the group's capital funding requirements and interest rate management. Furthermore, the board believes that under the current regulatory and statutory framework a period of five years to assess the group's longterm viability is appropriate, amongst other things, because of the underlying protection provided by Ofwat's primary legal duty to ensure that water and wastewater companies are able to finance their functions.

Accordingly, given that UUW represents 98 per cent of the UUG group's revenues, the UUW board similarly concluded that it was appropriate to adopt the going concern basis of accounting (see page 119) and provide a long-term viability statement as set out below.

Long-term viability statement

The directors have assessed the viability of the group, taking account of the group's current position, the potential impact of the principal risks facing the business in severe but reasonable scenarios, and the effectiveness of any mitigating actions. This assessment has been performed in the context of the group's prospects as considered over the longer term. Based on this viability assessment, the directors have a reasonable expectation that the group will be able to continue in operation and meet its liabilities as they fall due over the seven year period to March 2026.

Basis of assessment

The long-term planning detailed on page 44 assesses the group's prospects and establishes its strategy over a 25-year time horizon consistent with its rolling 25-year licence and its published long-term strategy. This provides a framework for the group's strategic planning process, and is key to achieving the group's aim of providing the best service to customers at the lowest sustainable cost and in a responsible manner over the longer term, underpinning our business model set out on pages 19 to 33.

In order to achieve this aim and promote the sustainability and resilience of the business, due consideration is given to the management of risks over the long-term that could impact on the business model, future performance, credit ratings, solvency and liquidity of the group. An overview of our risk management approach that supports the group's long-term planning and prospects, together with the principal risks and uncertainties facing the business, can be found on pages 62 to 73. This approach considers the full range of categories of risk that could impact the company, such as financial, operational and regulatory risks. In addition, consideration is given to the adequacy of workforce policies and practices, all liabilities including pension liabilities, any exposure to revenue variations, and expectations of future performance taking account of past performance in delivering for customers.

The viability assessment is performed on a standalone basis in relation to the United Utilities Water Limited group. The group is part of the United Utilities group. The regulated activities of the United Utilities Water Limited group represent 98% of the value of the United Utilities group as a whole, which taken together with the financial resources and interests of the regulated business being robustly ring-fenced, means there is minimal risk from the non-regulated activities.

Fundamental assumption

This viability statement is based on the fundamental assumption that the current regulatory and statutory framework does not substantively change, for example a change that facilitated the compulsory purchase of the shares or assets of either UUW or UUG for the Renationalisation of the water sector.

Viability assessment: resilience of the group

The viability assessment is based upon the group's medium-term business planning process, which sits within the overarching strategic planning process and considers:

- the group's current liquidity position with £890m of available liquidity at March 2019 covering funding requirements through to late 2020, this provides a significant buffer to absorb short-term cash flow impacts.
- the group's robust capital solvency and credit rating positions with a debt to regulatory capital value (RCV) ratio of around 64 per cent, a robust pension position and current credit ratings of A3/A-/A- with Moody's, S&P and Fitch respectively, this provides considerable headroom supporting access to medium-term liquidity where required.
- the group's expected performance, underpinned by its historical track-record -Ofwat's Initial Assessment of Plans, published in January 2019, scored the group's

- business plan the highest across the industry and has given good early visibility of expected cash flows for the 2020-25 period.
- the current regulatory framework within which the group operates which provides a high degree of cash flow certainty over the regulatory period and the broader regulatory protections outlined below.

The group has a proven track-record of being able to raise new forms of finance in most market conditions, and expects to continue to do so into the future. This is despite the likely inability to secure future EIB funding should the UK exit from the EU.

From a regulatory perspective, the group benefits from a rolling 25-year licence and a regulatory regime in which regulators – including the economic regulator, Ofwat – are required to have regard to the principles of best regulatory practice. These include that regulation should be carried out in a way that is transparent, accountable, proportionate, consistent and targeted. Ofwat's primary duties provide that it should protect consumers' interests, by promoting effective competition wherever appropriate; secure that the company properly carries out its statutory functions; secure that the company can finance the proper carrying out of these functions – in particular through securing reasonable returns on capital; and secure that water and wastewater supply systems have long-term resilience and that the company takes steps to meet long-term demands for water supplies and wastewater services.

In addition, from an economic perspective, given the market structure of water and wastewater services, threats to the group's viability from risks such as reduced market share, substitution of services and reduced demand are low compared to those faced by many other industries.

Viability assessment: resilience to principal risks facing the business

The directors have assessed the group's viability based on the resilience of the group and its ability to absorb a number of 'severe but reasonable' scenarios, derived from the principal risks facing the group, as set out on pages 62 to 73. Such risks include: environmental risks such as the occurrence of extreme weather events; political and regulatory risks; the risk of critical asset failure; significant cyber security breaches; and the potential for a restriction to the availability of financing resulting from a capital markets crisis. Specifically in relation to a "no deal" Brexit scenario, whilst this may have adverse operational and financial impacts on the group, this risk does not represent a significant risk to the ongoing viability of the group.

Based on these risks, the following largest impacting scenarios were identified:

- The individual scenarios modelled assumed a totex underperformance of 10%, inflation of 2% RPI/1% CPIH, an increase in bad debt of £10m per annum and an ODI penalty of 0.8% RORE for each year of the viability period and a one-off £500m totex impact in relation to one year of the viability period.
- The combined scenario modelled assumed a totex underperformance of 5%, inflation of 2% RPI/1% CPIH, an increase in bad debt of £10m per annum and an ODI penalty of 0.8% RORE for each year of the viability period.

These scenarios are similar to the 'common scenarios' prescribed by Ofwat for PR19, but reflect 'severe but reasonable' group specific scenarios that take account of risk mitigation strategies.

The assessment has considered the impact of these scenarios on the group's business model, future performance, credit ratings, solvency and liquidity over the course of the viability assessment period. This assessment has demonstrated the group's ability to absorb the impact of all severe but reasonable scenarios modelled, without the need to rely on the key mitigating actions detailed below.

As part of the assessment, reverse stress testing of extreme theoretical scenarios has been performed to understand the headroom in the group's ability to absorb all severe but reasonable scenarios.

Viability assessment: key mitigating actions

In the event of more extreme but low likelihood scenarios occurring, there are a number of key mitigations available to the group, the effectiveness of which are underpinned by the strength of the group's capital solvency position.

As well as the protections that exist from the regulatory environment within which the group operates, a number of actions are available to mitigate more severe scenarios, which include: the raising of new finance; capital programme deferral; the close out of derivative asset positions; the restriction of dividend payments; and access to additional equity.

Extending the viability period to seven years

Recognising the group's expected performance underpinned by its historical track-record, Ofwat's positive assessment of its 2020-25 business plan which was awarded fast-track status and the protections provided by the regulatory framework, the board considers it appropriate to extend the viability statement to cover a seven year period.

In determining this period, the board had regard for the increasing level of uncertainty as the duration of the assessment period is extended and the desire to maintain a robust viability assessment.

Governance

The analysis underpinning this assessment has been through a robust internal review process, which has included scrutiny and challenge from the audit committee and board, and has been reviewed by the group's external auditors, KPMG, as part of their normal audit procedures.

Going concern

The directors also considered it appropriate to prepare the financial statements on the going concern basis, as explained in the basis of preparation paragraph in accounting policies.

Significant issues considered in relation to the financial statements

With regard to the UUW financial statements the UUG audit committee and the UUW board reviewed a number of principal areas of judgement. These are disclosed on pages 108 and 109 of the UUG 2019 annual report and are all applicable to UUW with the exception of the carrying value of investment in the UUG group's investment in the Water Plus joint venture.

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 page 107 of the UUG 2019 annual report). The company's licence requires the preparation of audited regulatory accounts, therefore there are many advantages and efficiencies if KPMG also audits the regulatory accounts. Information on the assessment of the effectiveness of the external audit process can be found on page 106 of the UUG 2019 annual report.

The UUG group last undertook a formal tender process for its statutory audit service in March 2011 when Deloitte were replaced by KPMG. The appointment of statutory auditor is the responsibility of the UUG audit committee, as is the responsibility for agreeing the audit fee and the appointment of the audit engagement partner. An explanation is included on page 108 of the UUG 2019 annual report of the audit committee's current intention that a competitive tender would next be conducted most probably during 2020, for the statutory audit services for the financial year ended 31 March 2022.

Licence obligations

The board receives reports about the performance of the company, and during the year approved the 2018 Annual Performance Report and the associated Risk and Compliance Statement (the 'Statement'). The Statement sets out how the board pays particular regard to, and awareness of and how, it meets the obligations of its Licence.

Code principle: Remuneration

Directors' remuneration

The details of directors' remuneration can be found on pages 127 and 128. Further information on the group's approach to executive remuneration can be found in the remuneration report within the UUG 2019 annual report.

Departures from the Code

Section C of the Code – Code principle Accountability

UUG has an audit committee and the UUG group has an appropriately resourced internal audit function (see pages 109 and 110 of the UUG 2019 annual report) in place to which the UUW board has access and which reports to the UUW board on matters such as the company's regulatory returns to Ofwat. As the work of the audit committee is almost entirely undertaken on behalf of the company, the UUW board concluded that having a separate audit committee for UUW was not necessary. Membership of the audit committee consists entirely of independent non-executive directors who are also members of the UUW board. The report of the UUG audit committee can be found on pages 103 to 111 of the UUG 2019 annual report.

Section D of the Code - Code principle Remuneration

As UUG has a remuneration committee and because many aspects of executive directors' remuneration (in particular, employee share plans) operate at a UUG group level, the company remunerates its executive directors and senior management subject to the confines of UUG's remuneration policy. (For further details on UUG's remuneration policy, applicable for the year ended 31 March 2019 please see the remuneration report within the UUG 2017 annual report). In accordance with their letters of appointment the non-executive directors do not receive any remuneration from the company for their services to the UUW board. Membership of the UUG remuneration committee consists entirely of independent non-executive directors, who are also members of the UUW board. A revised UUG remuneration policy (see pages 116 to 130 of the UUG 2019 annual report) will be tabled at the 2019 UUG annual general meeting, and if approved by shareholders will take formal effect from 26 July 2019.

Section E of the Code – Code principle Relations with shareholders

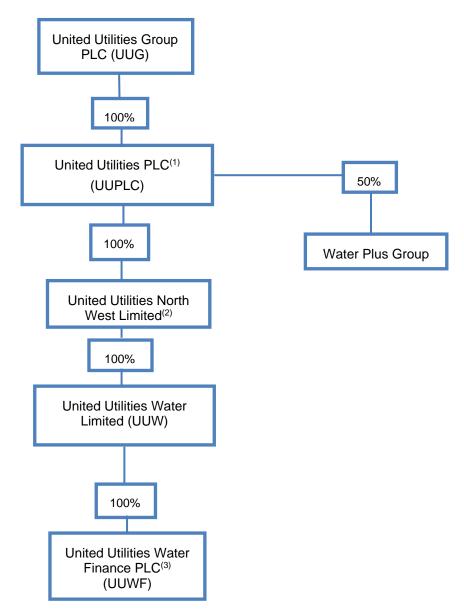
As a wholly owned subsidiary of UUG, this provision is not relevant to the company. UUG complies fully with this provision and makes a full disclosure in its annual report.

United Utilities group structure

As a group, United Utilities has a simple corporate structure. UUG has a primary listing on the London Stock Exchange with a stock code of 'UU'; it has around 70,000 registered shareholders. Below UUG, there are two intermediate holding companies, one is United Utilities PLC (UUPLC)⁽¹⁾ (which is also the holding company for a number of non-regulated and legacy/dormant companies) and United Utilities North West Limited (UUNW)⁽²⁾. The regulated company UUW is a direct subsidiary of UUNW which in turn is a direct subsidiary of UUPLC. Neither UUPLC nor UUNW are operational entities.

All companies are registered in England and Wales and copies of their accounts are available at Companies House.

United Utilities group structure chart



⁽¹⁾United Utilities PLC – was the listed ultimate holding company prior to July 2008, when the United Utilities group of companies underwent a scheme of arrangement as part of the return of value to shareholders from the proceeds of the sale of the electricity distribution business. This company is used from time to time to raise debt financing.

⁽²⁾United Utilities North West Limited – previously held the electricity distribution business prior to its disposal in 2007 and is retained for legal purposes.

⁽³⁾United Utilities Water Finance PLC is a 100% owned subsidiary of the company, used to raise debt finance in support of UUW. UUW also controls a majority stake in Lingley Mere Management Company Limited, which is an immaterial subsidiary. (See note A1 of financial statements).

⁽⁴⁾Water Plus Group Limited – 50 per cent joint venture with Severn Trent serving customers in the non-household (business) water and wastewater retail market.

Biographical details of the board of directors

Dr John McAdam

Chairman

Responsibilities: Responsible for the leadership of the board, setting its agenda and ensuring its effectiveness on all aspects of its role.

Appointment to the Board: March 2011

Qualifications: BSc (Hons) Chemical Physics, Diploma Advanced Studies in Science, PhD

Skills and experience: With over 19 years' service as a board director in a wide range of companies, and as a current non-executive director serving on a number of other boards and across different sectors, John has a wealth of past and current experience on which to draw in his role as Chairman and leader of the board.

Career experience: Joined the board of ICI plc in 1999 and became chief executive in 2003, a position held until ICI's takeover by Akzo Nobel. Previous non-executive roles: senior independent director J Sainsbury plc; non-executive director Rolls-Royce Holdings plc; senior independent director Electra Private Equity PLC; and chairman of Rentokil-Initial plc until 8 May 2019.

Current directorships/business interests: Non-executive and senior independent director of Cobham plc and appointed as non-executive director of Wilmcote Holdings plc on 1 October 2018. He is also Chairman of United Utilities Group PLC.

Independence: John met the 2016 UK Corporate Governance Code's independence criteria on his initial appointment as Chairman of UUG.

Specific contribution to the company's long-term success: During his final year as Chairman, John has continued to help drive the considerable progress made by the business throughout the tenure of his leadership.

Steve Mogford

Chief Executive Officer (CEO)

Responsibilities: To manage the company's business and to implement the strategy and policies approved by the board.

Qualifications: BSc (Hons) Astrophysics/Maths/Physics

Appointment to the board: March 2011

Skills and experience: Steve's experience of the highly-competitive defence market and complex design, manufacturing and support programmes has driven forwards the board's strategy of improving customer service and operational performance at United Utilities. His perspective of the construction and infrastructure sector provides valuable experience and insight to support United Utilities' capital investment programme.

Career experience: Previously chief executive of SELEX Galileo, the defence electronics company owned by Italian aerospace and defence organisation Finmeccanica, chief operating officer BAE Systems PLC and a member of its PLC board. His early career was spent with British Aerospace PLC.

Current directorships/business interests: Non-executive and senior independent director G4S PLC. He is also Chief Executive Officer of United Utilities Group PLC.

Specific contribution to the company's long-term success: As chief executive, Steve has driven a step change in the company's operational performance, leading to fast-track status in the PR19 price review process for the 2020–25 asset management period.

Russ Houlden

Chief Financial Officer (CFO)

Responsibilities: To manage the company's financial affairs and to contribute to the management of the group's business and to the implementation of the strategy and policies approved by the board.

Qualifications: BSc (Hons) Management Sciences, Fellow of the Chartered Institute of Management Accountants, Chartered Global Management Accountant and a Fellow of the Association of Corporate Treasurers

Appointment to the board: October 2010

Skills and experience: Russ's skills and experience in accounting in other commercial and regulated companies, along with his extensive experience of driving performance improvement provides the group with valuable expertise in pursuing its strategy of improving customer service and in providing our services at the lowest sustainable cost.

Career experience: Previously chief financial officer at Telecom New Zealand and finance director of: Lovells; BT Wholesale; BT Networks and Information Services; ICI Polyurethanes and ICI Japan.

Current directorships/business interests: Member of the supervisory board and chairman of the audit committee Orange Polska SA. Chairman of the financial reporting committee of the 100 Group. He is also Chief Financial Officer of United Utilities Group PLC.

Specific contribution to the company's long-term success: Russ helps to drive the transformation of the operational performance of the business, delivers the group's competitive advantage in financial risk management and ensures excellence in reporting to stakeholders.

Steve Fraser

Chief Operating Officer (COO)

Responsibilities: To develop the strategy for, and to manage, the company's operations.

Qualifications: BA (Hons) Management Studies, MSc Engineering Management, AMP Harvard University

Appointment to the board: April 2013 (also served as a director between July 2009 and March 2011.

Skills and experience: Steve brings a strong commercial acumen and operations focus to the wider business. He has a proven track record in managing networks and using his change management skills and broad experience across all aspects of utilities construction, programme and operations management.

Career experience: Steve has a wide range of project and contract management experience within the infrastructure sector. Prior to joining United Utilities in 2005, he was Operations Director of Bethell plc, the power and construction group.

Current directorships/business interests: He is also Chief Operating Officer of United Utilities Group PLC.

Specific contribution to the company's long-term success: Steve is responsible for addressing all operational activities. Through the close scrutiny and monitoring of these activities he ensures that adjusting actions are taken in order that the company's overall operational performance continues to improve.

Mark Clare

Independent non-executive director

Responsibilities: Responsible, in addition to his role as an independent non-executive director, for discussing any concerns with shareholders that cannot be resolved through the normal channels of communication with the Chairman or Chief Executive Officer.

Qualifications: Chartered Management Accountant (FCMA)

Appointment to the board: November 2013

Skills and experience: Through his previous roles at British Gas and BAA, Mark has a strong background operating within regulated environments. His extensive knowledge of customer-facing businesses is particularly valuable for United Utilities in the pursuit of our strategy to improve customer service.

Career experience: Previously chief executive Barratt Developments plc. A former trustee of the Building Research Establishment and the UK Green Building Council. Senior executive roles held in Centrica plc and British Gas. Former non-executive director: BAA plc and Ladbrokes Coral PLC.

Current directorships/business interests: Non-executive chairman Grainger plc and non-executive director Premier Marinas Holdings Limited. He is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: As senior independent non-executive director, Mark has led a robust selection process culminating in the appointment of Sir David Higgins as the next Chairman of the company.

Sara Weller

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board and to lead the board's activities concerning directors' remuneration.

Qualifications: MA Chemistry

Appointment to the board: March 2012

Skills and experience: Sara's experience of customer- facing businesses, together with her knowledge of operating within a regulated environment, provides the board with valuable perspective as the company improves its service to customers.

Career experience: Previously managing director of Argos; senior executive roles at Mars, Abbey National and J Sainsbury plc. Former non-executive and senior independent director Mitchells and Butlers plc and chair of the remuneration committee. Other non-executive roles: the Department for Communities and Local Government; the Higher Education Funding Council for England and the Planning Inspectorate.

Current directorships/business interests: Non- executive director Lloyds Banking Group plc; lead non-executive Department of Work and Pensions; and council member at

Cambridge University. She is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: As chair of the remuneration committee, Sara has played a key role in revising the directors' remuneration policy being presented for approval by UUG shareholders as this year's annual general meeting.

Brian May

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board and to chair the UUG audit and treasury committees.

Qualifications: BSc (Hons) Actuarial Science, Chartered Accountant FCA

Appointment to the board: September 2012

Skills and experience: Brian joined Bunzl plc in 1993 as head of internal audit before becoming group treasurer, then finance director (Europe and Australasia). Brian's background and the various finance roles that he has held are major assets to the board in chairing both the audit and the treasury committees. Brian has been chair of the UUG audit committee for nearly five years and has considerable knowledge of the company and the specifics of the utilities sector.

Career experience: Finance director Bunzl plc, since 2006. Prior to joining Bunzl, Brian qualified as a chartered accountant with KPMG.

Current directorships/business interests: Finance director Bunzl plc, he intends to retire from this role on 31 December 2019. He is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: Brian contributes his considerable expertise in finance to the group primarily through the important position of chair of the UUG audit committee. The industry knowledge he has gained during the six years as a board member, and his involvement in the second regulatory price review of his tenure, have provided continuity and knowledge to this vital long-term decision-making process.

Stephen Carter CBE

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board and to lead the board's agenda on acting responsibly as a business.

Qualifications: Bachelor of Laws (Hons)

Appointment to the board: September 2014

Skills and experience: As the chief executive of a FTSE 100 listed company, Stephen brings current operational experience to the board. His public sector experience provides additional insight in regulation and government relations. His day-to-day experience in the information and technology industries ensures that the board is kept abreast of these areas of the company's operating environment.

Career experience: Previously held senior executive roles at Alcatel Lucent Inc. and a number of public sector/service roles, including serving a term as the founding chief executive of Ofcom. Former chairman Ashridge Business School. A Life Peer since 2008.

Current directorships/business interests: Group chief executive Informa plc and non-executive director Department for Business, Energy and Industrial Strategy. He is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: Stephen's experience as a current chief executive and his work in the public sector and government provides valuable insight.

Alison Goligher

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board.

Qualifications: BSc (Hons) Mathematical Physics, MEng Petroleum Engineering

Appointment to the board: August 2016

Skills and experience: Alison has strong technical and capital project management skills, having been involved in large projects and the production side of Royal Dutch Shell's business. This experience of engineering and industrial sectors provides the board with additional insight into delivering United Utilities' capital investment programme.

Career experience: Royal Dutch Shell (2006 to 2015), her most recent executive role was Executive Vice President Upstream International Unconventionals. Prior to that she spent 17 years with Schlumberger, an international supplier of technology, integrated project management and information solutions to the oil and gas industry.

Current directorships/business interests: Non-executive director Meggitt PLC, part-time executive chair Silixa Ltd and a board member of Edinburgh Business School. She is also an independent non- executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: Alison's understanding of large capital projects and operational challenges provides valuable insight into the longer-term strategic risks faced by the business. Her role as the designated non-executive director for workforce engagement will provide the board with a first-hand understanding of the views of employees and the culture of the company.

Paulette Rowe

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board.

Qualifications: MEng (Hons) Mechanical Engineering and Management, MBA

Appointment to the board: July 2017

Skills and experience: Paulette has spent most of her career in the regulated finance industry and so provides the board with additional perspective and first-hand regulatory experience. Her experience of technology-driven transformation will contribute to United Utilities' customer experience programme and its Systems Thinking approach.

Career experience: Previously roles include: managing director, Barclaycard Payments Solutions; strategy director NBNK Investments plc; commercial and marketing director Tesco Personal Finance; chief executive, European Consumer Finance and managing director Royal Bank of Scotland. Former board member Prince's Youth Business Trust and former trustee and chair of children's charity The Mayor's Fund for London.

Current directorships/business interests: EMEA Executive Facebook Inc. since July 2018. She is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: Paulette shares her experience as a senior leader in financial services, and her current role in the technology sector, where technological innovations have driven improved customer service.

Sir David Higgins

Independent non-executive director

Responsibilities: To challenge constructively the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board and, in time, assume the role and responsibilities of Chairman.

Qualifications: BEng Civil Engineering, Diploma Securities Institute of Australia, Fellow: the Institute of Civil Engineers and the Royal Academy of Engineering

Appointment to the board: 13 May 2019

Skills and experience: Sir David has spent his career overseeing high profile infrastructure projects including: the delivery of the Sydney Olympic Village and Aquatics centre; Bluewater Shopping Centre, Kent; and the delivery of the 2012 London Olympic Infrastructure Project. He joined Network Rail in 2011, overseeing the operation of the rail network during the 2012 Olympic and Paralympic Games and the major redevelopment of stations including Birmingham New Street and London King's Cross.

Career experience: Former chief executive of: Network Rail Limited; The Olympic Delivery Authority and English Partnerships. Previous non-executive roles: chairman of High Speed Two Limited and Sirius Minerals plc.

Current directorships/business interests: Chairman of Gatwick Airport Limited. Non-executive director of Commonwealth Bank of Australia and chair of the remuneration committee and a member of the risk committee, he will step down in December 2019. He is also an independent non-executive director of United Utilities Group PLC.

Specific contribution to the company's long-term success: Sir David's experience of major infrastructure projects will be invaluable in meeting the challenges of the next regulatory period and beyond. He will take over as Chairman on 1 January 2020.

Directors' remuneration report

This report should be read in conjunction with note 3 to the financial statements, which provides information in respect of the total directors' remuneration.

All directors of United Utilities Water Limited (UUW) are also directors of United Utilities Group PLC (UUG). Further remuneration details including the policy can be found in the annual report and accounts of UUG.

For the purposes of this disclosure, the company's directors can be split into two categories:

- executive directors of UUW; and
- non-executive directors of UUW.

Non-executive directors

As outlined in the annual report and accounts of United Utilities Group PLC, the non-executive Chairman and non-executive directors do not participate in the company's incentive arrangements (i.e. annual bonus or share schemes) and were paid no remuneration linked to water service standards.

Executive directors' remuneration in 2018/19 (audited information)

	Base salary £'000	Benefits £'000	Cash allowance in lieu of pension £'000	Bonus (1) £'000	Long-term incentives (2) £'000	Total £'000
Steve Mogford	754	28	166	774	547	2,269
Russ Houlden	476	25	105	486	345	1,437
Steve Fraser	440	21	97	452	129	1,139

Note:

A recharge of £389,000 during the year ended 31 March 2019 (2018: £354,000) was charged to other companies in the United Utilities group in relation to the provision of executive director services (£338,000 (2018: £305,000)) and non-executive director services (£51,000 (2018: £49,000)).

⁽¹⁾50 per cent of each of the executive director's bonus was deferred in shares for three years under the Deferred Bonus Plan (DBP).

⁽²⁾ See pages 95 and 96 for further details on the long-term incentives.

Directors' remuneration report (continued)

2018/19 annual bonus (audited information)

Measure	Steve I	/logford	Russ H	loulden	Steve	Fraser
	Max.	Actual	Max.	Actual	Max.	Actual
	%	%	%	%	%	%
Underlying operating profit	30.0	19.5	30.0	19.5	30.0	19.5
Customer service in year						
Service Incentive Mechanism – Qualitative	12.0	6.0	12.0	6.0	12.0	6.0
Service Incentive Mechanism – Quantitative	4.0	4.0	4.0	4.0	4.0	4.0
Maintaining and enhancing ser	vices for	customer	S			
Wholesale outcome delivery incentive (ODI) composite	24.0	24.0	24.0	24.0	24.0	24.0
Time, cost and quality of capital programme (TCQi)	20.0	16.0	20.0	16.0	20.0	16.0
Personal objectives	10.0	9.5	10.0	9.0	10.0	9.5
Total as % bonus maximum	100.0	79.0	100.0	78.5	100.0	79.0
Total as % base salary	130.0	102.7	130.0	102.1	130.0	102.7
Total £'000		774		486		452

For each of these bonus measures there was a threshold level of performance which triggered a partial payment of bonus with a sliding scale providing for achievement of up to 100 per cent of the relevant element of bonus.

Long-term incentives

For 2018/19 the performance measures, and achievement against those measures for UUG shares previously granted to UUW executive directors which vested in 2018/19, or whose performance period ended in 2018/19 are summarised below:

Performance measure	Weighting	Achievement
Total shareholder return (TSR) over the performance period, relative to the median TSR of FTSE 100 companies (excluding financial services, oil and gas and mining companies)	33.3%	0.0% out of 33.3% (Actual)
Sustainable dividends. Average underlying dividend cover over the performance period, with a dividend growth underpin	33.3%	33.3% out of 33.3% (Subject to UUG shareholder approval of final dividend at UUG 2019 AGM)
Customer service excellence. Ranking for the year ended 31 March 2018 versus 17 other water companies using Ofwat's SIM combined score	33.3%	26.7% out of 33.3% (Estimated) ¹
Total vesting		60.0%

¹ The final outcome for the customer service excellence measure will not be known until Ofwat publishes the combined service incentive mechanism (SIM) score for the company and its comparator water companies (expected to be published in late summer 2019).

Directors' remuneration report (continued)

Details of the number of UUG shares vesting and value of these shares which vested in 2018/19, or whose performance period ended in 2018/19, are as follows:

Director	Number of shares vesting	Value of shares vesting £'000	
	2016 LTP1	2016 LTP ²	
Steve Mogford	66,297	547	
Russ Houlden	41,842	345	
Steve Fraser	15,705	129	

¹ The 2016 Long Term Plan (LTP) awards were granted in June 2016. The performance period started on 1 April 2016 and ended on 31 March 2019. The number and value of the vested 2016 LTP awards in the table above is estimated pending the final outcome of the customer service excellence measure, expected to be published in late summer 2019. Awards granted will normally vest in April 2021, following an additional two-year holding period. The awards accrue dividend equivalents.

Directors' remuneration in 2019/20

Directors' remuneration is expected to operate in a broadly similar way for 2019/20 as for 2018/19.

Incentive arrangements will continue to reflect the importance of achieving service standards and performance will again be assessed against a number of key measures including ODIs and customer service.

For the 2019/20 annual bonus the two SIM measures will be replaced by measures based on performance related to Ofwat's new C-MeX approach.

The UUG remuneration committee will be consulting with shareholders regarding the performance conditions for the long-term incentives to be granted in 2019.

² The value of the 2016 LTP awards has been calculated by multiplying the number of shares vesting by the average share price over the three month period 1 January 2019 to 31 March 2019 (824.5 pence per share).

Tax policies and objectives

Our tax policies and objectives, which are approved by the UUG board on an annual basis, ensure that we:

- only engage in reasonable tax planning aligned with our commercial activities and we always comply with what we believe to be both the letter and the spirit of the law;
- do not engage in marketed, aggressive or abusive tax avoidance;
- do not use tax havens for tax avoidance purposes;
- are committed to an open, transparent and professional relationship with HMRC based on mutual trust and collaborative working; and
- maintain a robust governance and risk management framework to ensure that these policies and objectives are fully complied with and applied at all levels.

In line with the above, we expect to fully adhere to the HMRC framework for co-operative compliance.

Our Chief Financial Officer ("CFO") has responsibility for tax governance with oversight from the board. The CFO is supported by a specialist team of tax professionals with many years of tax experience within the water sector and led by the Head of Tax. The Head of Tax has day-to-day responsibility for managing the group's tax affairs and engages regularly with key stakeholders from around the group in ensuring that tax risk is proactively managed. Where appropriate, he will also engage with both external advisers and HMRC to provide additional required certainty with the aim of ensuring that any residual risk is typically low. All significant tax issues are reported to the board regularly.

Consistent with the group's general risk management framework, all tax risks are assessed for the likelihood of occurrence and the negative financial or reputational impact on the group and its objectives, should the event occur. In any given period, the key tax risk is likely to be the introduction of unexpected legislative or tax practice changes which lead to increased cash outflow which has not been reflected in the current regulatory settlement. The group is committed to actively engaging with relevant authorities in order to manage any such risk.

In any given year, the group's effective cash tax rate on underlying profits may fluctuate from the standard UK rate due to the available tax deductions on capital investment and pension contributions. These deductions are achieved as a result of utilising tax incentives, which have been explicitly put in place by successive governments precisely to encourage such investment. This reflects responsible corporate behaviour in relation to taxation.

Under the regulatory framework the group operates within, the majority of any benefit from reduced tax payments will typically not be retained by the group but will pass to customers; reducing their bills. For 2018/19, the impact of tax deductions on capital investment alone reduced average household bills by around £25.

The group operates solely in the UK and its customers are based here. All of the group's profits are taxable in the UK.

Every year, the group pays significant contributions to the public finances on its own behalf as well as collecting and paying over further amounts for its 5,000 strong workforce. Details of the total payments for 2019 can be found on page 144 of the UUG 2019 annual report.

We expect the above details, which apply for the year ended 31 March 2019, to fully comply with the new legislative requirements for "Publication of Group Tax Strategies" for UK groups.

From summer 2019, United Utilities will publish a separate dedicated annual tax report on its website, which will include further information in relation to the following key areas:

- How much tax we pay;
- How we ensure that we the right tax at the right time; and
- How we ensure our tax affairs are transparent for all our stakeholders.

The directors present their management report and the audited financial statements for the year ended 31 March 2019.

Profit and dividends

The results for the year, set out in the consolidated income statement on page 114 show that profit for the year after tax was £332.8 million (2018: £339.2 million).

The directors have not recommended a final ordinary dividend (2018: £nil). Interim ordinary dividends of £375.6 million have been declared and paid during the year (2018: £316.7 million).

Business model

A description of the group's business model can be found within the Strategic Report.

United Utilities Water Limited ("UUW") is a subsidiary of United Utilities North West Limited. The ultimate parent company of UUW is United Utilities Group PLC ("UUG").

Corporate governance report

The corporate governance report on pages 74 to 98 including the remuneration report is hereby incorporated into this directors' report by reference. The current version of which was published by the Financial Reporting Council in 2016, a copy of which can be found at https://www.frc.org.uk/getattachment/ca7e94c4-b9a9-49e2-a824-ad76a322873c/UK-Corporate-Governance-Code-April-2016.pdf].

Political and charitable donations

The group does not support any political party and does 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 £9,338 (2018: £21,662) as part of this process. At the 2018 UUG AGM, an authority was taken to cover such expenditure. A similar resolution will be put to the UUG shareholders at the 2019 AGM to authorise 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 incurred by the group and charged to the income statement was £1.2 million in the year ended 31 March 2019 (2018: £1.2 million).

Events after the balance sheet date

Details of events occurring after the reporting period are included in note 22.

Going concern basis of accounting

The directors' considerations in preparing these financial statements on a going concern basis of accounting are set out in the corporate governance report and in the accounting policies note to the financial statements (see page 119).

Directors

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

Non-executive directors

Dr John McAdam
Stephen Carter
Mark Clare
Alison Goligher
Brian May
Paulette Rowe
Sara Weller
Sir David Higgins (appointed 13 May 2019)

Executive directors

Steve Mogford Steve Fraser Russ Houlden

Secretary

Simon Gardiner

At no time in the year did any director have a material interest in any contract or arrangement which was significant in relation to the group's business.

Directors' indemnities and insurance

The group has in place contractual entitlements for the directors of the company 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 group 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 group 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 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.

Furthermore, Alison Goligher has been designated as the non-executive director for leading the board's engagement with the workforce. Amongst other initiatives, an Employee Voice Panel has been established, chaired by Alison; 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. During the year, we have had regard to employee interests, consulting with employees and their representatives and trade union representatives in relation to new pension arrangements introduced on 1 April 2019 and consulting with employee representatives in relation to organisational changes for support and managerial roles. 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 104.

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 128.

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 35 to 38. 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 104.

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 33 to 42. 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 104.

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-webuy/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 2019, our average time taken to pay invoices was 24 days; in the previous six months it was 25 days.

Energy and Carbon

UUG's disclosure, in accordance with The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 can be found on page 145 of the UUG accounts.

Financial instruments

The risk management objectives and policies of the group in relation to the use of financial instruments can be found in note A5 to the financial statements.

Share capital

At 31 March 2019, the issued ordinary share capital of the company was £100.0 million divided into 100,000,000 ordinary shares of £1.00 each. Details of our share capital and movements in our issued share capital are shown in note 19 to the financial statements on page 141.

All our ordinary shares have the same rights, including the rights to one vote at any of our general meetings, to an equal proportion of any dividends we declare and pay, and to an equal amount of any surplus assets which are distributed in the event of a winding-up.

Disclosure of information 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 or she is aware, there is no relevant audit information of which the group's auditor is unaware; and
- 2. he or she has taken all the steps that he/she ought to have taken as a director in order to make himself/herself aware of any relevant audit information and to establish that the group's auditor is aware of that information.

This confirmation is given, and should be interpreted, in accordance with the provisions of section 418 of the Companies Act 2006.

Auditor

Pursuant to Section 487 of the Companies Act 2006, the auditor will be deemed to be reappointed and KPMG LLP will therefore continue in office. The remuneration of the auditor will be agreed by the UUG Audit Committee.

Approved by the board and signed on its behalf by:

Russ Houlden

Chief Financial Officer 12 June 2019

Non-financial information statement

The table below constitutes the company's non-financial Information statement ('the statement'), produced to comply with sections 414CA(1) and 414CB(1) of the Companies Act 2006. The statement is incorporated into the strategic report by cross reference. Our business principles set out how we behave as a business and are applicable to the areas of disclosure required by s414CB(1). Our business principles can be found on our website: unitedutilities.com/corporate/about-us/governance/business-principles/. The stakeholder metrics table (see page 52) also includes data in relation to the areas of disclosure required by s414CB(1).

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: > Natural resources – see pages 19 to 22 > Natural environment – see pages 22 to 24 > Reducing our carbon emissions – see pages 21 to 23	Waste and resource use policy Environmental policy Water resources management plan – see page 44 Emissions target – see page 146 of the UUG 2019 annual report.
Employees	Reflecting the needs of employees: Competitive base salaries and benefits – see page 27 Health and safety – see page 6 Mental wellbeing – see page 6 Engagement – see pages 34	 Health and safety policy Equality, diversity and inclusion policy Flexible working arrangements Agency worker policy Mental wellbeing policy Human rights policy Board diversity policy Gender pay report 2018
Respect for human rights	Reflecting the needs of our stakeholders: >Suppliers – see pages 38 and 39 >Employees and diversity within our workforce – see pages 36 and 37	>Employee data protection policy >Slavery and human trafficking statement >Human rights policy > Equality, diversity and inclusion policy
Social matters	Reflecting the needs of our stakeholders: Customers – see pages 34 and 35 Community – see pages 35 and 36 Environment– see pages 37 and 38 Suppliers – see pages 38 and 39 Regulators – see page 40	>YourVoice >Charitable matched funding guidance >Volunteering policy >Sustainable supply chain charter >Commercial procurement policy

Anti-corruption and	>Employees – see pages 36 and 37	>Anti – bribery policy
anti- bribery	>Suppliers – see pages 38 and 39	>Fraud investigation and reporting processes
		>Whistleblowing policy
		>Internal financial control processes
		Commercial procurement policy

Introduction

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.

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 Water Limited 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 (having regard to the stakeholders and matters set out in s172(1)(a-f) of the Act) in the decisions taken during the year ended 31 March 2019 (see pages 79 to 81). In particular, by reference to the approval of our business plan ('our plan') for the period 2020–25, supported by the board assurance statement accompanying our plan:

- Our plan was designed to have a long-term beneficial impact on the company and to contribute to its success in delivering 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 our regulatory targets. Our plan was awarded 'fast-track' status and commended in relation to: customer engagement, affordability and vulnerability, resilience and innovation (see pages 15 to 19).
- Our employees are fundamental to the delivery of our plan. We aim to be a responsible employer in our approach to the pay and benefits our employees receive. The health, safety and well-being of our employees is one of our primary considerations in the way we do business (see page 6).
- Our duty, in accordance with the Water Industry Act 1991, is to provide a safe and secure supply of water and return wastewater safely to the environment. Our plan was informed by extensive engagement 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 (see page 17). We have made a commitment to share the gains of out-performance with customers. We also aim to act responsibly and fairly in how we engage with our suppliers (see pages 39 to 41) and cooperate with our regulators (see page 40), all of whom are integral to the successful delivery of our plan.
- Our plan took into account the impact of the company's operations on the community and environment and our wider societal responsibilities, and in particular how we impact the regions we serve in the North West of England (see pages 35 to 38). Several of the proposed performance measures in our plan will deliver environmental improvements.
- As the Board of Directors, our intention is to behave responsibly and ensure that management operate the business in a responsible manner, operating within the high

standards of business conduct and good governance expected for a business such as ours (see pages 74 to 98) and in doing so, will contribute to the delivery of our plan. The intention is to nurture our reputation, through both the construction and delivery of our plan, that reflects our responsible behaviour.

• 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.

Statement of directors' responsibilities in respect of the annual 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 are required to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRSs as adopted by the EU) and applicable law and have elected to prepare the parent Company financial statements on the same basis.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent Company and of their profit or loss for that period. In preparing each of the Group and parent Company financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant and reliable;
- state whether they have been prepared in accordance with 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.

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

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:

Russ Houlden Chief Financial Officer 12 June 2019

Independent auditor's report

to the members of United Utilities Water Limited

1. Our opinion is unmodified

We have audited the financial statements of United Utilities Water Limited ("the Company") for the year ended 31 March 2019 which comprise the Consolidated income statement, the Consolidated statement of comprehensive income, the Consolidated and company statement of financial position, the Consolidated and company statement of changes in equity, the Consolidated and company statement of cashflows, and the related notes, including the accounting policies on pages 119 to 125.

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 2019 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 appointed as auditor by the directors on 9 October 2017. The period of total uninterrupted engagement is for the seven financial years ended 31 March 2019. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

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

Key audit matters are those matters that, in our professional 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, 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 Water Limited

Revenue recognition and allowance for household customer debt

Revenue not recognised: £18.0 million (2018: £20.3 million) Provision for customer debts: £52.9 million (2018: £63.2 million)

Refer to pages 124 and 166 (accounting policy), and page 135 (financial disclosures).

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, with a potential range of reasonable outcomes greater than our materiality for the financial statements as a whole. The financial statements (Accounting policies note, page 124) disclose the sensitivities estimated by the Group.

Our Response

Our procedures included:

Accounting analysis – Assessing the recognition of revenue where the collection of consideration is not probable on the date of sale for compliance with relevant accounting standards:

Control observation – Testing the group's 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

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 bad debt provision.

Our results:

- We found the amount of revenue recognised to be acceptable; and
- We considered the level of provisioning against household customer debts to be acceptable.

Capitalisation of costs relating to the capital programme

£720.0 million (2018: £732.6 million)

Refer to pages 125 and 167 to 169 (accounting policy), and pages 133 to 134 (financial disclosures).

The Risk

Subjective classification:

The group has a substantial capital programme which has been agreed with the Water Services Regulation Authority (Ofwat)

Our Response

Our procedures included:

Accounting analysis – Assessing the group's capitalisation policy for compliance with relevant accounting standards;

Independent auditor's report

to the members of United Utilities Water Limited

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 125) disclose the sensitivities estimated by the Group.

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;

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 corroborated enquiry and our sector knowledge; 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.

Retirement benefit obligation valuation

£2,531.8 million (2018: £2,600.3 million)

Refer to pages 125 and 172 to 173 (accounting policy), and pages 137 to 138 and 157 to 164 (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 the Group expects to pay 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

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. We also compared the IAS 19 valuation with the triennial funding valuations of the UK schemes notwithstanding that they were prepared on a different basis and as at different dates;

Methodology assessment: we used our own

Independent auditor's report to the members of United Utilities Water Limited

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 A6) disclose the sensitivity estimated by the Group.

actuarial specialists to assess the appropriateness and consistency of the methodology applied by management in setting the key assumptions;

Benchmarking assumptions: we performed 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;

Assessing external actuary's credentials: we assessed 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 A6 to the financial statements.

Our results:

We found the resulting estimate of the retirement benefit obligations to be 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 £18.51 million (2018: £18.51 million), determined with reference to a benchmark of profit before tax, normalised to exclude net fair value gains or losses on debt and derivative instruments of £7.3 million as disclosed in note 6, of £409.0 million, of which it represents 4.5% (2018: 4.8%). Materiality for the parent company financial statements as a whole was set at £18.50 million (2018: £18.50 million), determined with reference to a benchmark of company profit before tax, normalised to exclude net fair value gains or losses on debt and derivative instruments as disclosed in note 6, of £409.0 million, of which it represents 4.5% (2018: 4.8%). We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.5 million, in addition to other identified misstatements that warranted reporting on qualitative grounds.

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

Independent auditor's report

to the members of United Utilities Water Limited

they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the group and the company will continue in operation.

In our evaluation of the directors' conclusions, we considered the inherent risks to the group's and the company's business model and analysed how those risks might affect the group's and the company's financial resources or ability to continue operations over the going concern period. The risks that we considered most likely to adversely affect the group's and the company's available financial resources over this period were:

- a significant increase in required total expenditure;
- funding to be obtained in line with forecast; and
- the impact of macro-economic factors on household customers' ability to pay.

As these were risks that could potentially cast significant doubt on the group's and the company's ability to continue as a going concern, we considered sensitivities over the level of available financial resources indicated by the group's financial forecasts taking account of reasonably possible (but not unrealistic) adverse effects that could arise from these risks individually and collectively and evaluated the achievability of the actions the directors consider they would take to improve the position should the risks materialise. We also considered less predictable but realistic second-order impacts, such as the impact of Brexit and the erosion of customer or supplier confidence, which could result in a rapid reduction of available financial resources.

Based on this work, we are required to report to you if we have anything material to add or draw attention to in relation to the directors' statement on page 119 of the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the group and company's use of that basis for a period of at least 12 months from the date of approval of the financial statements. We have nothing to report in these respects and we did not identify going concern as a key audit matter.

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 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.

Independent auditor's report

to the members of United Utilities Water Limited

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 106, 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 company'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 audit.

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

Firstly, the company is subject to laws and regulations that directly affect the financial statements; including financial reporting legislation (including related companies legislation);

Independent auditor's report to the members of United Utilities Water Limited

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 company 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, Environmental 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 company's activities and legal form. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the directors and inspection of regulatory and legal correspondence, if any. 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 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 12 June 2019

Consolidated income statement

for the years ended 31 March

	Note	2019 £m	2018 £m
Revenue	2	1,798.0	1,716.6
Employee benefits expense Other operating costs Other income Depreciation and amortisation expense Infrastructure renewals expenditure	3 4 4 4	(163.8) (446.5) 3.6 (391.4) (175.1)	(147.8) (413.4) 3.6 (375.3) (149.5)
Total operating expenses		(1,173.2)	(1,082.4)
Operating profit		624.8	634.2
Investment income Finance expense	5 6	12.0 (235.1)	8.5 (226.5)
Investment income and finance expense		(223.1)	(218.0)
Profit before tax		401.7	416.2
Current tax charge Deferred tax charge	7	(38.4) (30.5)	(21.4) (55.6)
Tax	7	(68.9)	(77.0)
Profit after tax		332.8	339.2
	;		

All of the results shown above relate to continuing operations.

Consolidated statement of comprehensive income

for the years ended 31 March

	Note	2019 £m	2018 £m
Profit after tax		332.8	339.2
Other comprehensive income	-		
Items that may be reclassified to profit or loss in subsequent per Cash flow hedge effectiveness* Tax on items that may be reclassified to profit or loss	iods: 7	0.4 (0.1)	
Other comprehensive income that may be reclassified to profit or loss	-	0.3	-
Items that will not be reclassified to profit or loss in subsequent profit or loss in subsequent profit or loss in subsequent profit or loss. Change in credit assumptions for debt reported at fair value through profit or loss. Cost of hedging – cross-currency basis spread adjustment* Tax on items that will not be reclassified to profit or loss.	periods: 14 7	68.3 6.6 (2.3) (12.3)	34.6 - (5.9)
Other comprehensive income that will not be reclassified to profit or loss	-	60.3	28.7
Total comprehensive income	- -	393.4	367.9
	-		

^{*}On adoption of IFRS 9, the group has recognised the cost of hedging reserve and the cash flow hedging reserve as new components of equity. A reconciliation of movements in these reserves, including amounts reclassified from other comprehensive income to profit or loss during the year, is included in note 18.

Consolidated and company statement of financial position

at 31 March

Group	and	com	pany
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Group and company			
		2019	2018
	Note	£m	£m
ASSETS			
Non-current assets Property plant and aguipment	0	11 007 2	10 720 0
Property, plant and equipment Intangible assets	9 10	11,097.2 202.7	10,738.9 197.7
Investments	A1	0.1	0.1
Trade and other receivables	11	100.0	100.0
Retirement benefit surplus	14	373.8	264.1
Derivative financial instruments	A5	387.8	297.8
		12,161.6	11,598.6
Current assets		40.4	0.4
Inventories Trade and other receivables	11	10.4 301.3	8.1 298.0
Cash and short-term deposits	12	325.8	499.6
Derivative financial instruments	A5	100.7	218.5
		738.2	1,024.2
Total assets		12,899.8	12,622.8
1014. 400010			
LIABILITIES			
Non-current liabilities			
Trade and other payables	17	(696.8)	(642.0)
Borrowings	13	(7,449.2)	(7,302.5)
Deferred tax liabilities Derivative financial instruments	15 A5	(1,121.0) (66.1)	(1,078.1) (96.8)
Derivative financial instruments	AS		
		(9,333.1)	(9,119.4)
Current liabilities			
Trade and other payables	17	(314.7)	(262.5)
Borrowings	13	(791.3)	(817.4)
Current tax liabilities	40	(8.9)	(1.3)
Provisions Derivative financial instruments	16 A5	(16.8) (13.7)	(20.4) (4.2)
Derivative infancial instruments	7.0	(1,145.4)	(1,105.8)
Total liabilities			
		(10,478.5)	(10,225.2)
Total net assets		2,421.3	2,397.6
EQUITY Capital and reserves attributable to equity holders			
of the company Share capital	19	100.0	100.0
Other reseves	18	12.3	100.0
Retained earnings	. •	2,309.0	2,297.6
Shareholder's equity		2,421.3	2,397.6

These financial statements for the group and United Utilities Water Limited (company number: 2366678) were approved by the board of directors and authorised for issue on 12 June 2019, and signed on its behalf by:

Russ Houlden Chief Financial Officer

Consolidated and company statement of changes in equity

for the years ended 31 March

Group	and	com	pany
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Group and company	Share	Other	Retained	
		reserves*	earnings	Total
	£m	£m	£m	£m
At 31 March 2018	100.0		2,297.6	2,397.6
Adjustment on initial application of IFRS 9 Adjustment on initial application of IFRS 15	-	13.9	(13.9) 5.9	5.9
At 1 April 2018 Profit after tax Other comprehensive income/(expense) Remeasurement gains on defined benefit pension	100.0	13.9	2,289.6 332.8	2,403.5 332.8
schemes (see note 14) Change in credit assumptions for debt reported at	-	-	68.3	68.3
fair value through profit or loss	-	-	6.6	6.6
Cash flow hedge effectiveness Cost of hedging - cross currency basis spread	-	0.4	-	0.4
adjustment	-	(2.3)	_	(2.3)
Tax on items taken directly to equity (see note 7)		0.3	(12.7)	(12.4)
Total comprehensive income		(1.6)	395.0	393.4
Dividends (see note 8)			(375.6)	(375.6)
At 31 March 2019	100.0	12.3	2,309.0	2,421.3
		Share	Retained	
		capital	earnings	Total
		£m	£m	£m
At 1 April 2017		100.0	2,246.4	2,346.4
Profit after tax Other comprehensive (expense)/income		-	339.2	339.2
Remeasurement gains on defined benefit pension sch	nemes		24.0	24.0
(see note 14) Tax on items taken directly to equity (see note 7)		-	34.6 (5.9)	34.6 (5.9)
Total comprehensive income			367.9	367.9
Total comprehensive income				
Dividends (see note 8)			(316.7)	(316.7)
At 31 March 2018		100.0	2,297.6	2,397.6

^{*} Other reserves comprise the cost of hedging reserve and cash flow hedging reserve, which were included as separate components of equity for the first time in the year ended 31 March 2019 as a result of the group's adoption of IFRS 9 'Financial instruments' (see pages 119 to 121 accounting policies). A reconciliation of movements in these reserves is included in note 18.

As permitted by section 408 of the Companies Act 2006, the company has not presented its own income statement. The results of the company are not materially different from the group.

Consolidated and company statement of cash flows

for the years ended 31 March

Group and company

,		2019	2018
	Note	£m	£m
Operating activities			
Cash generated from operations	A2	986.7	1,004.4
Interest paid		(147.2)	(150.6)
Interest received and similar income		4.7	4.4
Tax paid	-	(27.5)	(35.5)
Net cash generated from operating activities	_	816.7	822.7
Investing activities			
Purchase of property, plant and equipment		(614.3)	(690.6)
Purchase of intangible assets		(39.9)	(36.1)
Proceeds from sale of property, plant and equipment		2.4	1.4
Grants and contributions received	17	35.2	23.7
Net cash used in investing activities		(616.6)	(701.6)
Financing activities			
Proceeds from borrowings		637.7	858.4
Repayment of borrowings		(637.8)	(345.4)
Dividends paid to equity holders of the company	8	(375.6)	(316.7)
Net (used in)/cash from financing activities		(375.7)	196.3
Net (decrease)/increase in cash equivalents	_	(175.6)	317.4
Cash and cash equivalents at beginning of the year		488.0	170.6
Cash and cash equivalents at end of the year	12	312.4	488.0
	=		

The principal accounting policies adopted in the preparation of these financial statements are set out below. Further detail can be found in note A8.

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, taking account of the group's financial projections, together with its liquidity position with regards to available cash and undrawn committed borrowing facilities, as well as consideration of the group's capital adequacy. The board has also considered the magnitude of potential impacts resulting from uncertain future events or changes in conditions, the likelihood of their occurrence and the likely effectiveness of mitigating actions that the directors would consider undertaking.

Adoption of new and revised standards

The following standards, interpretations and amendments, effective for the year ended 31 March 2019, have had no material impact on the group's financial statements:

 Amendments to IFRS 2 'Classification and Measurement of Share-based Payment Transactions' (issued on 20 June 2016).

The following standards, interpretations and amendments, effective for the year ended 31 March 2019, have had a material impact on the group's financial statements – this impact is discussed further below:

- IFRS 9 'Financial Instruments' (issued on 24 July 2014); and
- IFRS 15 'Revenue from Contracts with Customers' (issued on 28 May 2014) including amendments to IFRS 15: Effective date of IFRS 15 (issued on 11 September 2015).

IFRS 9 'Financial Instruments'

IFRS 9 'Financial Instruments' was adopted by the group on 1 April 2018. The standard replaces IAS 39 'Financial Instruments: Recognition and Measurement', and has been applied retrospectively in accordance with the standard's transition requirements. Comparative periods have not been restated, with any differences arising from retrospective application being recognised as an adjustment to retained earnings at the beginning of the period. This has resulted in retained earnings at the adoption date decreasing by £13.9 million with a corresponding credit of £13.9 million to the cost of hedging reserve, which is a separate component of equity newly recognised under IFRS 9. Further details of these adjustments are set out below.

Under IFRS 9, there is no longer a requirement for cross-currency basis spread adjustments to be incorporated in the test for the effectiveness of a hedge as was the case under IAS 39. IFRS 9 states that when an entity separates the foreign currency basis spread from a financial instrument, and excludes it from the designation of that financial instrument as the hedging instrument, the entity may apply the accounting such that the change in fair value resulting from the foreign currency basis spread can be recognised in other comprehensive income rather than in profit or loss to the extent that it relates to the hedged item. Under the standard this change in fair value relating to the basis spread adjustment, which effectively represents a liquidity charge inherent in foreign exchange contracts for exchanging currencies, shall be accumulated in a separate component of equity. This has been recorded as a cost of hedging reserve.

The group has adopted this accounting treatment under IFRS 9, resulting in the creation of a cost of hedging reserve with a brought forward balance of £13.9 million at 1 April 2018, being the accumulated fair value gains to date at this point relating to the basis spread adjustment on cross-currency swaps in place at the adoption date. The portion of the change in fair value due to changes in the cross-currency basis spread during the period, which has been recognised in other comprehensive income, has been a £2.3 million loss. This would have previously been incorporated within the fair value charge recognised in the income statement under IAS 39. A deferred tax credit of £0.4 million has been recognised in other comprehensive income during the period in relation to this basis spread adjustment.

Where the group has chosen to measure borrowings at fair value through profit or loss, the portion of the change in fair value due to changes in the group's own credit risk, which has been a £6.6 million gain during the period, has been recognised in other comprehensive income rather than within profit or loss, and has been taken directly to retained earnings, meaning no opening retained earnings adjustment has been required. A deferred tax charge of £1.1 million has been recognised in other comprehensive income during the period in relation to this gain.

On adoption of IFRS 9, there were no financial assets or liabilities initially designated at fair value through profit or loss that have subsequently been reclassified out of this category.

The group has reassessed the effectiveness of existing accounting hedges on adoption of IFRS 9 and the documentation that supports any designation. Financial instruments that had been designated in an accounting fair value hedge relationship under IAS 39 continue to be designated as such under IFRS 9; however, the group has reassessed its position with regards to designating non-financial risks in hedge relationships, and has determined that in order to give a more representative view of operating costs it would be appropriate to designate existing and future swaps as being in a cash flow hedge relationship provided they meet the criteria for designation. This means that only the impact of any hedging ineffectiveness is recognised through fair value in the income statement, with movements reflecting the effective part of the swaps being recognised in other comprehensive income. At the maturity date the amounts paid/received will be recognised against operating costs in the income statement, including the effect of any fair value movements reflecting hedge effectiveness previously recognised in other comprehensive income.

Previously, no income relating to these swaps would have been recognised against corresponding operating expenses, with the £4.2 million gain for the year being recognised in full as a fair value movement as part of finance expense. The treatment under IFRS 9 has led to the settlement of existing swaps in the period giving rise to income of £3.8 million recognised against operating expenses, with a fair value gain of £0.4 million recognised in other comprehensive income together with a corresponding increase in the cash flow hedge reserve as the hedge was fully effective. A deferred tax charge of £0.1 million has been recognised in other comprehensive income during the year in relation to this gain recognised in other comprehensive income.

On transition to the expected credit loss model for impairing financial assets in accordance with the standard, the group has not been significantly impacted as under IAS 39 the group had always used a model which used historic cash collection rates to form an expectation of the

estimated recoverability of trade receivables at a point in time. The simplified approach, whereby the company recognises full lifetime credit losses on initial recognition, has been adopted.

IFRS 15 'Revenue from Contracts with Customers'

The group adopted IFRS 15 on 1 April 2018, applying the standard retrospectively with the cumulative effect of initial application recognised at the date of initial application as an adjustment to retained earnings. Prior period comparatives have therefore not been restated. The group has elected to use the practical expedient whereby any contracts that were completed in accordance with accounting standards as at 31 March 2018 need not be restated on an IFRS 15 basis. This transition approach, which was made in accordance with the IFRS 15 transitional provisions, has resulted in a £2.6 million increase in retained earnings and reduction in deferred income on the adoption date due to a change in the period over which revenue relating to connection activities is recognised. This has also given rise to a tax credit of £3.3 million relating to the adjustment, which has resulted in an increase in retained earnings at the adoption date. The tax credit is greater than the £2.6 million increase in retained earnings on adoption of IFRS 15 due to the different tax treatments of various connection activities that make up the adjustment.

The two main areas of the group's activities considered in the adoption of IFRS 15 are:

- the provision of core water and wastewater services, accounting for more than 97 per cent of the group's revenue; and
- capital income streams relating to diversions work, and activities, typically performed opposite property developers, that facilitate the creation of an authorised connection through which properties can obtain water and wastewater services.

The adoption of IFRS 15 had no impact on the timing or amount of revenue recognised in relation to core water and wastewater services, which are deemed to be distinct performance obligations under the contracts with customers, though following the same pattern of transfer to the customer who simultaneously receives and consumes both of these services over time. No significant judgements are required in identifying customers of these services. In accordance with IFRS 15, revenue relating to these activities will be recognised over time as these performance obligations are satisfied.

There are two categories of capital income, both of which will be impacted by the adoption of IFRS 15:

- diversions relating to the relocation of water and wastewater assets; and
- activities that facilitate the creation of an authorised connection through which properties can obtain water and wastewater services.

The adoption of IFRS 15 did not result in any net income statement impact relating to diversions as income was previously recognised in line with the completion of diversion work. However, whereas this income was included in the income statement as a credit within infrastructure renewals expenditure (IRE) due to it representing a contribution towards these costs, under IFRS 15 it is now recognised within revenue, resulting in an increase in both the revenue and IRE expense balances. The adoption of the standard in the year has caused both balances to increase by £11.1 million. As there was no net impact to the income statement, there was also no net impact to earnings per share or diluted earnings per share as a result of this element of the new standard.

Significant judgement is required in relation to accounting for activities that facilitate an authorised network connection through which water and wastewater services can be delivered. Establishing such an authorised connection can involve a number of activities performed opposite developers, which are considered to be neither separable nor distinct and instead form a bundle of activities necessary to establish an authorised connection from which network access can be obtained and water and wastewater services can be provided. Costs incurred by

the group in carrying out these activities are capitalised as property, plant and equipment to the extent they result in the creation or enhancement of assets. These activities are considered to form part of the group's ordinary activities associated with the operation, maintenance and expansion of a water and wastewater network and, because they are deemed to result in an exchange transaction, we have determined that they fall within the scope of IFRS 15 as transactions arising from contracts with customers.

In addition, as the group has a legal obligation to keep a connection in place for as long as a property requires water and wastewater services, these initial connection activities are deemed to result in a broader ongoing performance obligation that is not distinct from the ongoing supply of water and wastewater services. The right to benefit from this connection, and obtain water and wastewater services through it, is deemed to be transferable from the initial developer to subsequent occupants of a connected property. Accordingly, under IFRS 15, the element of the performance obligation associated with the connection activities is deemed to be satisfied over the period of time that water and wastewater services are expected to be provided through the connection, compared with the prior treatment under which deferred amounts were released to the income statement over the useful economic life of the related assets or, for certain items, immediately to the income statement. This estimated period is a matter of judgement. We estimate that an average connection will be in place for a period of 60 years and therefore revenue associated with connection activities will be recognised evenly over this period.

Contract liabilities are accounted for within deferred revenue. These contract liabilities relate to the revenue which is held on the balance sheet in respect of connection activities. As stated above, revenue is released and recognised evenly over a period of 60 years; therefore deferred income on the balance sheet will also be reduced evenly over the 60 year period on a connection-by-connection basis. The group will hold no material contract assets, meaning there will be no material impairments to contract assets under IFRS 9 given the new requirement to provide for expected credit losses for contract assets.

As noted above, we have applied IFRS 15 retrospectively, with the cumulative effect of initially applying the standard recognised as an adjustment to the opening retained earnings balance at the date of initial application, resulting in an increase of £2.6 million in retained earnings with the corresponding decrease being to deferred income. In line with the standard, contracts which were completed in accordance with current accounting standards at the date of initial application were not restated on an IFRS 15 basis. The impact of the change on ongoing revenue as a result of the revised period over which income is released to the income statement is that revenue of £13.4 million was recognised in the year relating to the amortisation of deferred income; had IFRS 15 not been adopted, this revenue recognised in the year would have been £9.9 million. The adoption of IFRS 15 has therefore resulted in an increase of revenue of £3.5 million. This has directly impacted the amount of revenue and profit of the group with the corresponding decrease of the adoption of IFRS 15 being in deferred income on the balance sheet.

New and revised standards not yet effective

At the date of authorisation of these financial statements, the following relevant major standards were in issue but not yet effective. The directors anticipate that the group will adopt these standards on their effective dates.

IFRS 16 'Leases'

This standard, which replaces IAS 17 'Leases', IFRIC 4 'Determining Whether an Arrangement Contains a Lease', SIC-15 'Operating Leases – Incentives', and SIC-27 'Evaluating the Substance of Transactions in the Legal Form of a Lease', is effective for periods commencing on or after 1 January 2019. The group therefore adopted the standard on 1 April 2019 with the 31 March 2020 financial statements being the first which will be presented with IFRS 16 being applied. Under the provisions of the new standard, most leases, including the majority of those previously classified as operating leases where the group is the lessee, will be brought onto the statement of financial position as both a right-of-use asset and an offsetting lease liability. The typical items which the group leases include land, buildings, and vehicles. The right-of-use asset

and lease liability 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 group does not act as a lessor.

The key judgements associated with adoption of 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 the rate is not implicit in the lease contract.

The group has reassessed whether contracts it has entered into are, or contain, leases as defined by the new standard, so the new standard is being applied to a different population of contracts to those previously identified as containing leases under IAS 17 and IFRIC 4. Some new contracts have been identified as leases, while other contracts previously identified as operating leases under IAS 17 and IFRIC 4 will not be accounted for as leases under the new standard.

Due to the nature of the group's operations, many of the current operating leases have long remaining terms, which causes the discount rate to be a key factor in determining the value of the lease liability. Where 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 to calculate the lease liability will be based on the relevant group company's nominal incremental borrowing rate adjusted for the payment profile and term of each lease.

The group intends to use the modified retrospective transitional approach permitted by the standard in which the right-of-use asset and lease liability brought onto the balance sheet on the adoption date will be based on the present value of future lease payments at the adoption date calculated using the appropriate discount rate at 1 April 2019. Under this approach there will be no effect on retained earnings recognised on transition. After the initial adoption of the standard, lease liabilities and right-of-use assets for new leases will be based on the corresponding discount rate at the date the new contract is entered into. Prior year comparatives will not be restated.

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

Based on the appropriate incremental borrowing rates at 31 March 2019, the right-of-use asset and liability brought onto the balance sheet is estimated to be £51.5 million. Absent new leases being entered into or cancellation of existing leases, the income statement charge in the year of adoption in respect of these leases is estimated to be £3.3 million, split between £2.0 million of depreciation of the assets and £1.3 million in relation to the finance charge recognised on the liabilities. This compares with £3.4 million of operating lease expenses that would have been recognised under IAS 17. The group does not expect the adoption of IFRS 16 to impact its ability to comply with any banking or financing covenants.

The actual impacts of adopting the standard on 1 April 2019 may differ from the figures quoted above as new accounting policies may be subject to change until the group presents its first financial statements that include the date of initial application.

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.

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.

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 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 £18.0 million of amounts billed not being recognised as revenue during the year (net of cash receipts and credits). 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 £12.8 million lower. Payments received in advance of revenue recognition are recorded as deferred income.

Accounting estimate - at each reporting date, the company and each of its subsidiaries evaluate the estimated recoverability of trade receivables and record allowances for doubtful receivables based on experience. Judgements 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 2019, the allowance for doubtful receivables relating to household customer debt of £52.9 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 been £50.9 million or £53.5 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 price review processes. For 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 2019 was £47.2 million. Had actual consumption been five per cent higher or lower than the estimate of units supplied this would have resulted in revenue recognised for unbilled amounts being £4.2 million higher or lower respectively. For customers who do not have a meter, the receivable billed and revenue recognised is dependent on the rateable value of the property, as assessed by an independent rating officer.

Property, plant and equipment

Accounting judgement - the group recognises property, plant and equipment (PPE) on its water and wastewater infrastructure assets where such expenditure enhances or increases the capacity of the network, whereas any expenditure classed as maintenance is expensed in the period it is incurred. Determining enhancement from maintenance expenditure requires an accounting judgement, particularly when projects have both elements within them. Enhancement spend was 26 per cent of total spend in relation to infrastructure assets during the year. A change of +/- one per cent would have resulted in £2.4 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 58 per cent of total support costs. A change in allocation of +/- one per cent would have resulted in £0.8 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. The depreciation and amortisation expense for the year was £391.4 million. A 10 per cent increase in average asset lives would have resulted in a £38.9 million reduction in this figure and a 10 per cent decrease in average asset lives would have resulted in a £39.5 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 A6.

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 A5.

1. Segmental reporting

The group operates and is managed as one class of business, which is the provision of water and wastewater services, therefore no segmental information is required to be disclosed.

2. Revenue

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

	2019	2018
	£m	£m
Wholesale water charges Wholesale wastewater charges Residential retail charges Other	767.4 905.8 86.7 38.1	719.2 875.6 91.1 30.6
	1,798.0	1,716.6

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.

Residential retail charges relate solely to the margin applied to the wholesale amounts charged to residential customers. The wholesale charges and retail margin are combined in arriving at the total revenues relating to water and wastewater services provided to household customers.

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

3. Directors and employees

Directors' remuneration

	2019 £m	2018 £m
Fees to non-executive directors Salaries	0.8 1.7	0.7 1.6
Benefits Bonus	0.4 0.9	0.4 0.8
Share-based payment charge	2.4	1.9
	6.2	5.4

Included within the above are aggregate emoluments of £2.4 million (2018: £2.3 million) in respect of the highest paid director.

A recharge of £0.4 million during the year ended 31 March 2019 (2018: £0.4 million) was charged to other companies in the United Utilities group in relation to the provision of director services. No executive directors accrued benefits under defined benefit schemes, and all executive directors opted for a cash allowance in lieu of their defined contribution pension entitlement during the current and prior year.

Three directors (2018: three directors) received shares in United Utilities Group PLC in respect of qualifying services. Three directors (2018: three directors) had long-term incentive plans which vested during the year. Aggregate amounts receivable relating to long-term incentive plans were £1.0 million (2018: £0.8 million), were recognised during the year.

Remuneration of key management personnel

	2019 £m	2018 £m
Salaries and short-term employee benefits Severance	5.2	5.3 0.6
Post-employment benefits Share-based payment charge	3.1	24
chare based payment charge	8.3	8.3

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

3. Directors and employees (continued)

Employee benefits expense (including directors)

	2019 £m	2018 £m
Wages and salaries Employee-related taxes and levies Severance Post-employment benefits:	233.8 24.1 4.8	220.4 22.8 3.7
Defined benefit pension expense (see note 14) Defined contribution pension expense (see note 14)	14.7 23.0	29.6 12.1
Employee benefits expense before recharges	37.7	288.6
Amounts recharged to parent and fellow subsidiary companies Charged to other areas including regulatory capital schemes	(2.4)	(3.0) (137.8)
Employee benefits expense	163.8 	147.8

Within employee benefits expense there were £7.1 million (2018: £5.9 million) of restructuring costs, £5.5 million of costs associated with the equalisation of Guaranteed Minimum Pension (GMP) benefits (2018: nil) and £1.4 million (2018: nil) of costs incurred in relation to the group's response to the severe dry weather event experienced during the year.

A recharge of £2.4 million during the year ended 31 March 2019 (2018: £3.0 million) was charged to other companies in the UUG group in relation to the provision of employee services.

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 2019 UUG annual report and financial statements. Included within wages and salaries is an expense of £3.8 million (2018: £3.0 million) relating to a recharge of share-based payment costs from the ultimate parent undertaking (see note A7).

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

	2019	2018
	number	number
Average number of employees during the year	5,028	4,964

The 2019 total employee benefits expense, before recharges, of £300.4 million (2018: £288.6 million) includes the employee costs relating to the persons employed during the year noted above in addition to costs of £17.6 million (2018: £19.8 million) in relation to services provided by employees of United Utilities PLC who support UUW. These costs have been incurred directly by UUW throughout the year but relate to employees of United Utilities PLC. The average number of employees of United Utilities PLC providing services to the company during the year was 239 (2018: 259).

4. Operating profit

	2019	2018
	£m	£m
Other operating costs		
Hired and contracted services	111.3	96.8
Property rates	94.6	90.5
Materials	77.4	66.9
Power	75.9	72.9
Regulatory fees	32.5	29.7
Charge for bad and doubtful receivables (see note 11)	26.7	20.7
Loss on disposal of property, plant and equipment	3.6	6.4
Operating leases payable:		
Property	2.8	3.3
Plant and equipment	1.3	0.7
Compensation from insurers	-	(3.6)
Settlement of commercial claims	(9.9)	-
Other expenses	30.3	29.1
	446.5	413.4
Other income		
Other income	(3.6)	(3.6)
	(3.6)	(3.6)
Depreciation and amortisation expense		
Depreciation of property, plant and equipment (see note 9)	355.5	346.9
Amortisation of intangible assets (see note 10)	35.9	28.4
	391.4	375.3

During the current 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, £10.5 million of infrastructure renewals expenditure, and £1.4 million of employee costs (see note 3).

During the prior year, as a result of two significant flooding incidents in December 2015, there were £5.3 million of expenses incurred, comprising £2.9 million of operating costs, £2.4 million of infrastructure renewals expenditure. Insurance compensation of £3.6 million relating to the flooding incidents was recognised as part of a final settlement of the insurance claim. In addition, in the prior year, there were £1.0 million of market reform restructuring costs relating to the non-household retail market opening to competition in April 2017.

Total other operating costs are stated net of £0.2 million (2018: £1.4 million) of costs recharged to Water Plus at nil margin under transitional service agreements.

Research and development expenditure for the year ended 31 March 2019 was £1.2 million (2018: £1.2 million).

During the year, the group obtained the following services from its auditor, with a total value of £355,000 (2018: £312,000), which are broken down as follows:

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2019 £'000	2018 £'000
Audit services	2000	2000
Statutory audit – group and company	262	216
Statutory audit – subsidiary	19	17
	281	233
Non-audit services		
Regulatory audit services provided by the statutory auditor	47	46
Other non-audit services	28	33
	356	312

5. Investment income

J .	mvestment income		
		2019 £m	2018 £m
	Interest receivable on short-term bank deposits held at amortised cost	2.3	1.0
	Interest receivable on loans to joint ventures of the UUG group held at amortised cost (see note A7)	2.4	2.0
	Net pension interest income (see note 14)	7.3	5.5
		12.0 =	8.5
6.	Finance expense	2019	2018
	Interest consults	£m	£m
	Interest payable Interest payable on borrowings held at amortised cost ⁽¹⁾ Interest payable on borrowings from intermediate parent	215.3	242.0
	undertakings	3.4	2.6
	Preference share dividends (see note 8)	9.1	9.1
		227.8	253.7
	Fair value (gains)/losses on debt and derivative instruments Fair value hedge relationships:		
	Borrowings ⁽²⁾	23.2	(81.6)
	Designated swaps ^{(2) (3)}	(10.0)	91.0
		13.2	9.4
	Financial instruments at fair value through profit or loss		
	Borrowings designated at fair value through profit or loss ⁽⁴⁾	32.8	(27.8)
	Associated swaps ⁽⁵⁾⁽⁶⁾	(37.1)	63.7
		(4.3)	35.9
	Fixed interest rate swaps ⁽⁵⁾	19.1	(87.4)
	Electricity swaps ⁽⁷⁾	-	(8.0)
	Net payments on derivatives and debt under fair value option	(20.1)	(0.1)
	Other swaps ⁽⁵⁾⁽⁸⁾	-	2.2
	Realisation of fair value loss on settlement of borrowings held at amortised cost ⁹⁾		23.1
	Other	(0.6)	(2.3)
		(1.6)	(72.5)
	Net fair value losses/(gains) on debt and derivative instruments ⁽¹⁰⁾	7.3	(27.2)
		235.1	226.5

Notes:

⁽¹⁾ Includes a £98.3 million (2018: £137.8 million) non-cash inflation uplift expense in relation to the group's index-linked debt.

⁽²⁾ Includes foreign exchange losses of £8.4 million (2018: £6.0 million gains), excluding those on instruments measured at fair value through profit or loss. These gains/losses are largely offset by fair value gains/losses on derivatives.

⁽³⁾ Under the provisions of IFRS 9 'Financial instruments', changes in fair value resulting from changes to the foreign currency basis spread (£2.3 million gain) are recognised in other comprehensive income rather than profit or loss as they relate to items designated in an accounting hedge relationship. In the prior year, there was an £7.2 million gain on designated swaps recognised within profit or loss.

6. Finance expense (continued)

- (4) Under the provisions of IFRS 9 'Financial instruments', changes in fair value due to changes in the group's own credit risk (£6.6 million gain) are recognised in other comprehensive income rather than within profit or loss. In the prior year, there was a £24.0 million loss, which was recognised 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 a £3.8 million gain caused by the settlement of certain cross-currency interest rate swap liabilities.
- ⁽⁷⁾ From 1 April 2018, under the provisions of IFRS 9, electricity swaps have been designated within cash flow hedge relationships. Gains or losses resulting from the effective portion of the hedge are recognised within other comprehensive income in the cash flow hedge reserve. Any other gains or losses are recognised immediately in the income statement. The cash flow hedges are deemed to be fully effective and, therefore, have no impact on net fair value gains in the income statement. In the prior year, the electricity swaps were not designated within a hedge relationship and an £8.0 million gain was recognised in net fair value gains in the income statement.
- (8) Includes fair value movements in relation to other economic hedge derivatives relating to debt held at amortised cost, which matured during the year ended 31 March 2018.
- (9) The fair value loss in the prior year results from the partial close-out of £50.0 million RPI index-linked notes due April 2043. The portion of the notes closed out had a nominal value of £30.0 million (carrying value £41.3 million), and were purchased at a fair value of £64.4 million resulting in a £23.1 million fair value loss.

Interest payable is stated net of £37.4 million (2018: £39.7 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 3.1 per cent (2018: 3.6 per cent) to expenditure on such assets as prescribed by IAS 23 'Borrowing Costs'.

7. Tax

	2019 £m	2018 £m
Current tax UK corporation tax Adjustments in respect of prior years	41.3 (2.9)	26.8 (5.4)
Total current tax charge for the year	38.4	21.4
Deferred tax Current year Adjustments in respect of prior years	32.4 (1.9)	49.5 6.1
Total deferred tax charge for the year	30.5	55.6
Total tax charge for the year	68.9	77.0

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:

	2019	2019	2018	2018
	£m	%	£m	%
Profit before tax	401.7		416.2	
Tax at the UK corporation tax rate	76.3	19.0	79.1	19.0
Adjustments in respect of prior years	(4.8)	(1.2)	0.7	0.2
Deferred tax rate adjustment/other	(2.6)	(0.7)	(2.8)	(0.7)
Total tax charge and effective tax rate for the year	68.9	17.1	77.0	18.5

⁽¹⁰⁾ Includes £14.3 million income (2018: £3.7 million) due to net interest on derivatives and debt under fair value option.

7. Tax (continued)

The deferred tax rate adjustment/other, mainly comprises the deferred tax movement calculated at the future tax rate from April 2020 of 17 per cent rather than the current rate of 19 per cent.

The adjustments in respect of prior years relate to agreement of prior years' UK tax matters.

For the current year, there is also an adjustment for items included in retained earnings, following the adoption of IFRS 15 (see accounting policies for further details).

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

2040

2019	2018
£m	£m
401.7	416.2
76.3	79.1
(91.0)	(88.8)
64.8	60.6
1.0	(13.3)
(8.5)	(8.6)
(7.1)	(7.5)
4.6	2.3
(2.9)	(5.4)
(0.1)	2.0
1.3	1.0
38.4	21.4
	£m 401.7 76.3 (91.0) 64.8 1.0 (8.5) (7.1) 4.6 (2.9) (0.1) 1.3

The group's current tax charge is lower than the UK headline rate of 19 per cent, primarily due to the availability of capital allowances; tax deductions in relation to capital expenditure available instead of accounting depreciation and put in place by successive governments to encourage such investment.

There are also various other adjustments where there is a simple timing difference between recognition of the income or expense in the accounts and in the related tax computations submitted to HMRC. These include unrealised profits or losses in relation to financing and related treasury derivatives, pension contributions and capitalised interest.

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.

For all of the timing differences, the corresponding deferred tax movements are at 17 per cent as the rate of corporation tax will reduce to 17 per cent from April 2020.

Tax on items taken directly to equity

	2019	2018
	£m	£m
Deferred tax (see note 15)		
On remeasurement gains on defined benefit pension schemes	11.6	5.9
On net fair value gains recognised in other comprehensive income	0.8	-
Total tax charge on items taken directly to equity	12.4	5.9

8. Dividends

Amounts recognised as distributions to equity holders of the company in the year comprise:

	2019	2018
	£m	£m
Ordinary shares		
Interim dividend for the year ended 31 March 2017 at		
29.3 pence per share	-	29.3
Interim dividend for the year ended 31 March 2019 at		
146.0 pence per share (2018: 127.9 pence)	146.0	127.9
Interim dividend for the year ended 31 March 2019 at		
76.6 pence per share (2018: 94.7 pence)	76.6	94.7
Interim dividend for the year ended 31 March 2019 at		
153.0 pence per share (2018: 64.8 pence)	153.0	64.8
	375.6	316.7

The directors have not recommended a final ordinary dividend (2018: £nil).

The company's redeemable preference shares are included in the statement of financial position as a liability and, accordingly, dividends payable on them are included in net interest payable (see notes 6 and 13).

9. Property, plant and equipment

Group and company	Land and buildings	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 2017 Additions Transfers Disposals	356.2 2.4 12.0 (1.4)	5,243.0 70.7 72.6 (0.1)	6,990.1 120.4 141.4 (46.4)	500.4 10.1 23.4 (3.7)	935.4 529.0 (249.4)	14,025.1 732.6 - (51.6)
At 31 March 2018 Additions Transfers Disposals	369.2 5.5 (12.3) (1.0)	5,386.2 60.8 43.4	7,205.5 122.2 78.0 (42.4)	530.2 11.9 6.5 (6.4)	1,215.0 519.6 (115.6)	14,706.1 720.0 - (49.8)
At 31 March 2019	361.4	5,490.4	7,363.3	542.2	1,619.0	15,376.3
Accumulated depred At 1 April 2017 Charge for the year Disposals	111.9 9.4 (1.3)	345.9 39.5	2,868.7 259.0 (39.4)	337.6 39.0 (3.1)	- - -	3,664.1 346.9 (43.8)
At 31 March 2018 Charge for the year Transfers Disposals	120.0 8.4 (0.5) (0.6)	385.4 35.3 0.5	3,088.3 277.1 - (37.6)	373.5 34.7 (5.4)	-	3,967.2 355.5 (43.6)
At 31 March 2019	127.3	421.2	3,327.8	402.8		4,279.1
Net book value At 31 March 2018	249.2	5,000.8	4,117.2	156.7	1,215.0	10,738.9
At 31 March 2019	234.1	5,069.2	4,035.5	139.4	1,619.0	11,097.2

9. Property, plant and equipment (continued)

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 2019, the group and company had entered into contractual commitments for the acquisition of property, plant and equipment amounting to £293.3 million (2018: £430.1 million).

In addition to these commitments, the group and company have long-term expenditure plans which include investments to achieve improvements in performance required by regulators and to provide for future growth.

10. Intangible assets

Group and company	Total £m
Cost At 1 April 2017 Additions	356.6 38.4
At 31 March 2018 Additions	395.0 40.9
At 31 March 2019	435.9
Accumulated amortisation At 1 April 2017 Charge for the year At 31 March 2018 Charge for the year At 31 March 2019	168.9 28.4 197.3 35.9 233.2
Net book value at 31 March 2018	197.7
Net book value at 31 March 2019	202.7

The group and company's intangible assets relate mainly to computer software.

At 31 March 2019, the group and company had entered into contractual commitments for the acquisition of intangible assets amounting to £1.5 million (2018: £2.8million).

Total

11. Trade and other receivables

Group and company	2019 £m	2018 £m
Trade receivables Amounts owed by intermediate parent and fellow subsidiary undertakings (see note A7):	91.0	105.6
Trading balances	21.1	6.1
Floating rate loan	40.0	40.0
Amounts owed by other related parties (see note A7)	139.2	142.2
Other debtors and prepayments	33.9	40.8
Accrued income	76.1	63.3
	401.3	398.0

At 31 March 2019, the group and company had £100.0 million (2018: £100.0 million) of trade and other receivables classified as non-current, which related to amounts owed by related parties.

The carrying amounts of trade and other receivables approximate their fair value.

Trade receivables do not carry interest and are stated net of allowances for doubtful receivables, an analysis of which is as follows:

Group and company	2019 £m	2018 £m
At the start of the year Amounts charged to operating expenses (see note 4) Trade receivables written off Amounts charged to deferred income Amounts charged to infrastructure renewals expense	63.2 26.7 (33.5)	85.3 20.7 (44.6) 1.6 0.2
At the end of the year	56.4	63.2

Amounts charged to deferred income relate to amounts invoiced for which revenue had not yet been recognised in the income statement.

Amounts charged to infrastructure renewals expenditure relate to amounts invoiced in relation to contributions towards the cost of infrastructure renewals incurred as a result of carrying out infrastructure diversions works.

At each reporting date, the group and company evaluates the recoverability of trade receivables and records allowances for doubtful receivables based on experience.

At 31 March 2019 and 31 March 2018, the group and company had no trade receivables that were past due and not individually impaired.

The following table provides information regarding the ageing of net trade receivables that were past due and individually impaired:

		Aged		
		between	Aged	
	Aged	one year	greater	
	less than	and	than two	Carrying
Group and company	one year	two years	years	value
	£m	£m	£m	£m
Trade receivables				
At 31 March 2019	63.6	25.6	1.8	91.0
At 31 March 2018	76.9	24.5	4.2	105.6

At 31 March 2019, the group and company had no trade receivables that were not past due (2018: £nil).

12. Cash and cash equivalents

Group and company	2019 £m	2018 £m
Cash at bank and in hand Short-term bank deposits	3.2 322.6	0.1 499.5
Cash and short-term deposits	325.8	499.6
Book overdrafts (included in borrowings, see note 13)	(13.4)	(11.6)
Cash and cash equivalents in the statement of cash flows	312.4	488.0

Cash and short-term deposits include cash at bank and in hand, deposits, and other short-term highly liquid investments which are readily convertible into known amounts of cash and have a maturity of three months or less. The carrying amounts of cash and cash equivalents approximate their fair value.

Book overdrafts, which result from cash management practices, represent the value of cheques issued and payments initiated that had not cleared as at the reporting date.

13. Borrowings

	2019	2018
Group and company	£m	£m
Non-current liabilities Bonds ⁽¹⁾ Bank and other term borrowings Amounts owed to intermediate parent undertaking (see note A7)	4,440.7 2,301.0 707.5	4,375.7 2,349.5 577.3
Ourself Pal Pro-	7,449.2	7,302.5
Current liabilities Bonds Bank and other term borrowings Book overdrafts (see note 12) 130,000,000 7.0 per cent £1.00 redeemable preference shares Amounts owed to intermediate parent undertaking (see note A7) ⁽²⁾	441.9 143.6 13.4 130.0 62.4	150.8 127.1 11.6 130.0 397.9
	791.3	817.4
	8,240.5	8,119.9

Note:

The £130.0 million 7.0 per cent redeemable preference shares have been presented as amounts falling due within one year as they may be redeemed by not less than 30 days' written notice served by the group or the shareholder. Preference shareholders are not entitled to receive notice of, attend or vote at, any general meeting of the group. However, preference shareholders receive priority to other classes of shareholders on a winding up, liquidation or other return of capital to shareholders of the group. The preference shares have a latest redemption date of 1 October 2099.

For further details of the principal economic terms and conditions of outstanding borrowings see note A4.

⁽¹⁾ For the company, bonds includes £1,502.2 million (2018: £1,021.1 million) of amounts owed to subsidiary undertakings.

⁽²⁾ For the company, £0.3 million (2018: £0.2 million) of amounts is owed to subsidiary undertakings.

14. Retirement benefit surplus

Defined benefit schemes

The net pension expense before tax recognised in the income statement in respect of the defined benefit schemes is summarised as follows:

2019	2018
£m	£m
5.1	25.6
7.8	2.2
1.8	1.8
14.7	29.6
(7.3)	(5.5)
7.4	24.1
	£m 5.1 7.8 1.8 14.7 (7.3)

Defined benefit pension costs excluding curtailments/settlements included within employee benefit expense were £6.9 million (2018: £27.4 million) comprising current service costs and administrative expenses.

Total post-employment benefits expense excluding curtailments/ settlements charged to operating profit of £29.9 million (2018: £39.5 million) comprise the defined benefit costs described above of £6.9 million (2018: £27.4 million) and defined contribution pension costs of £23.0 million (2018: £12.1 million) (see note 3).

Included within curtailments/settlements is £5.5 million (2018: £nil) relating to the equalisation of GMP benefits (see note A6 for further details).

The reconciliation of the opening and closing net pension surplus included in the statement of financial position is as follows:

2019 £m	2018 £m
264.1	194.5
(7.4)	(24.1)
48.8	59.1
68.3	34.6
373.8	264.1
	£m 264.1 (7.4) 48.8 68.3

Included in the contributions paid of £48.8 million (2018: £59.1 million) were deficit repair contributions of £41.1 million (2018: £32.7 million), enhancements to benefits provided on redundancy of £1.4 million (2018: £1.2 million), administration expenses of £0.3 million (2018: £0.3 million) and an inflation funding mechanism payment of £nil made during the year (2018: £0.3 million). Following the 2018 actuarial valuation, contributions in relation to current service cost decreased to £6.0 million (2018: £24.6 million; 2016 actuarial valuation).

14. Retirement benefit surplus (continued)

Remeasurement gains and losses are recognised directly in the statement of comprehensive income.

Group and company	2019 £m	2018 £m
The return on plan assets, excluding amounts included in interest Actuarial (losses)/ gains arising from changes in financial assumptions	47.1 (121.7)	(46.5) 63.3
Actuarial gains arising from changes in demographic assumptions	50.2	31.6
Actuarial gains/(losses) arising from experience	92.7	(13.8)
Remeasurement gains on defined benefit pension schemes	68.3	34.6

For more information in relation to the group's and company's defined benefit pension schemes see note A6.

Defined contribution schemes

During the year, the group and company made £23.0 million (2018: £12.1 million) of contributions to defined contribution schemes which are included in employee benefit expense (see note 3).

15. 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:

	Accelerated tax	Retirement benefit		
	depreciation	obligations	Other	Total
Group and company	£m	£m	£m	£m
At 1 April 2017 Charged to the income statement	1,009.8	33.1	(26.3)	1,016.6
(see note 7)	37.5	5.9	12.2	55.6
Charged to equity (see note 7)	-	5.9		5.9
At 31 March 2018	1,047.3	44.9	(14.1)	1,078.1
Charged/(credited) to the income statemer	nt			
(see note 7)	26.3	7.0	(2.8)	30.5
Charged to equity (see note 7)		11.6	0.8	12.4
At 31 March 2019	1,073.6	63.5	(16.1)	1,121.0

Certain deferred tax assets and liabilities have been offset in accordance with IAS 12 'Income Taxes'.

16. Provisions

Group and company	Restructuring	Other	Total
	£m	£m	£m
At 1 April 2017	3.7	19.2	22.9
Charged to the income statement	3.7	1.0	4.7
Utilised in the year	(4.8)	(2.4)	(7.2)
At 31 March 2018 Charged to the income statement Utilised in the year	2.6	17.8	20.4
	4.8	(0.3)	4.5
	(4.6)	(3.5)	(8.1)
At 31 March 2019	2.8	14.0	16.8

The group and company had no provisions classed as non-current at 31 March 2019 or 31 March 2018.

The restructuring provision as at 31 March 2019 and 31 March 2018 relates to severance costs as a result of group reorganisation.

Other provisions principally relate to contractual, legal and environmental claims against the group and company 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.

17. Trade and other payables

Group and company	2019 £m	2018 £m
Non-current		
Deferred grants and contributions	671.2	617.0
Other creditors	25.6	25.0
- -	696.8	642.0
Current		
Trade payables	32.8	27.0
Amounts owed to parent and fellow subsidiary undertakings (see note	47) 2.2	2.2
Amounts owed to other related parties (see note A7)	0.6	0.8
Other tax and social security	5.4	5.3
Deferred grants and contributions	13.3	8.8
Accruals and other creditors	225.8	178.5
Deferred income	34.6	39.9
	314.7	262.5
	1,011.5	904.5
=		

Included within accruals and other creditors as at 31 March 2019 was £6.3 million (2018: £4.8 million) of accrued interest, which at the company level was owed to subsidiary undertakings.

The average credit period taken for trade purchases is 25 days (2018: 23 days).

The carrying amounts of trade and other payables approximate their fair value.

17. Trade and other payables (continued)

Deferred grants and contributions

Group and company	2019 £m	2018 £m
At the start of the year	625.8	579.2
Amounts capitalised during the year	35.7	23.7
Transfer of assets from customers	39.4	34.2
Credited to retained earnings – impact of adoption of		
IFRS 15 'Revenue from contracts with customers'	(2.6)	-
Credited to the income statement – revenue	(12.9)	(3.3)
Credited to the income statement – other operating costs	(0.5)	(6.4)
Credited to allowance for bad and doubtful receivables	(0.4)	(1.6)
	684.5	625.8

18. Other Reserves

Other Reserves	Cost of hedging reserve £m	Cash flow hedging reserve £m	Total £m
At 31 March 2018	-	-	-
Adjustment on initial application of IFRS 9	13.9	-	13.9
At 1 April 2018	13.9	-	13.9
Other comprehensive income			
Change in fair value recognised in other			
comprehensive income	(2.3)	3.5	1.2
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
At 31 March 2019	12.0	0.3	12.3

On adoption of IFRS 9, the group has recognised the cost of hedging reserve as a new component of equity during the year. 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.

19. Share capital

Group and company	2019 £m	2018 £m
Issued, called up and fully paid 100,000,000 (2018: 100,000,000) ordinary shares of £1.00 each 130,000,000 7 per cent cumulative redeemable preference	100.0	100.0
shares of £1.00 each	130.0	130.0
Less: 130,000,000 7 per cent cumulative redeemable preference	230.0	230.0
shares of £1.00 each designated as borrowings (see note 13)	(130.0)	(130.0)
	100.0	100.0

Preference shareholders are not entitled to receive notice of, attend or vote at, any general meeting of the group. However, preference shareholders receive priority to other classes of shareholders on a winding up, liquidation or other return of capital to shareholders of the company.

In accordance with IAS 32 'Financial Instruments: Presentation', 130,000,000 7 per cent preference shares of £1.00 each have been recognised as financial liabilities. The 7 per cent preference shares have a redemption date of 1 October 2099. For further information, see note 13.

20. Operating lease commitments

3	Property 2019	Plant and equipment 2019	Property 2018	Plant and equipment 2018
Group and company	£m	£m	£m	£m
Commitments under non-cancellable operating leases due:				
Within one year	2.6	0.5	2.6	0.6
In the second to fifth years inclusive	9.0	0.4	9.3	0.4
After five years	279.8		279.7	
	291.4	0.9	291.6	1.0

In respect of the group and company's commitment to significant property leases, there are no contingent rentals payable, or restrictions on dividends, debt or further leasing imposed by these lease arrangements. Wherever possible, the group ensures that it has the benefit of security of tenure where this is required by operational and accommodation strategies. Escalation of rents is via rent reviews at agreed intervals.

21. Contingent liabilities

No performance guarantees have been entered into as at 31 March 2019 by either the group or the company (2018: none).

22. Events after the reporting period

After the reporting period, the group paid accelerated deficit repair contributions of £81.4 million to its defined benefit pension schemes, further details of which are included in note A6. In addition to this, the group increased its CPI-linked debt by executing a £100 million CPI-linked bank loan with a 10-year maturity, and entered into inflation swaps against three existing RPI-linked bonds with aggregate motional value of £100.4 million, swapping cash flows from RPI- to CPI-linkage. None of these events have been included in the financial statements for the year ended 31 March 2019 as they represent non-adjusting events after the reporting period.

23. Ultimate parent undertaking

The company's immediate parent undertaking is United Utilities North West Limited, a company incorporated in England and Wales.

The company's ultimate parent undertaking and controlling party is United Utilities Group PLC, a company incorporated in England and Wales.

The smallest group in which the results of the company are consolidated is that headed by United Utilities Water Limited.

The largest group in which the results of the company are consolidated is that headed by United Utilities Group PLC. The consolidated accounts of this group are available to the public and may be obtained from: The Company Secretary, United Utilities Group PLC, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP.

A1 Subsidiaries and other group undertakings

Details of the company's subsidiary undertakings and significant holdings in undertakings other than subsidiary undertakings, all of which are unlisted, are set out below. The registered address for each entity is Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP, United Kingdom.

	Class of share capital held	Proportion of share capital owned %	Nature of business
Subsidiary undertakings England and Wales			
United Utilities Water Finance PLC	Ordinary	100.00	Financing company
Lingley Mere Management Company Limited	Ordinary	60.77	Property management

During the year the United Utilities group assumed control of Lingley Mere Management Company Limited (LMMC), a company that had previously been a joint venture of the United Utilities group, following an enfranchisement in accordance with LMMC's articles of association under which occupants of the Lingley Mere Business Park became entitled to participate in the ordinary share capital of LMMC based on their level of occupancy. Control is split between UUW and United Utilities Property Services (UUPS), who respectively hold a 60.77 per cent and 29.93 per cent stake in LMMC. The non-controlling interest in LMMC is not considered to be material for either the UUW or United Utilities groups (see note A8).

The company does not hold any interests in joint ventures or associated undertakings. All other investments are held at fair value.

A2 Cash generated from operations

Group and company	2019 £m	2018 £m
Profit before tax Adjustment for investment income (see note 5) and	401.7	416.2
finance expense (see note 6)	223.1	218.0
Operating profit	624.8	634.2
Adjustments for:		
Depreciation of property, plant and equipment (see note 9)	355.5	346.9
Amortisation of intangible assets (see note 10)	35.9	28.4
Impairment of property, plant and equipment (see note 9)	-	-
Loss on disposal of property, plant and equipment (see note 4)	3.6	6.4
Amortisation of deferred grants and contributions (see note 17)	(12.9)	(6.4)
Other non-cash movements	-	(3.3)
Changes in working capital:		
(Increase)/Decrease in inventories	(2.3)	0.9
(Increase)/Decrease in trade and other receivables	(3.0)	42.1
Increase/(Decrease) in trade and other payables	22.7	(12.8)
Decrease in provisions (see note 16)	(3.6)	(2.5)
Pension contributions paid less pension expense charged		
to operating profit	(34.0)	(29.5)
Cash generated from operations	986.7	1,004.4

The group and company have received property, plant and equipment of £39.4 million (2018: £34.2 million) in exchange for the provision of future goods and services (see notes 17 and A8).

A3 Net debt

Group and company	2019 £m	2018 £m
At the start of the year	7,165.0	6,856.8
Net capital expenditure	616.6	701.6
Dividends (see note 8)	375.6	316.7
Interest	142.5	146.2
Inflation uplift on index-linked debt (see note 6)	98.3	137.8
Tax	27.5	35.5
Net fair value gains on debt and derivative instruments recognised		
in finance expense (see note 6)	7.3	(27.2)
Net fair value gains on debt and derivative instruments recognised		
in other comprehensive income	(4.7)	-
Less: net receipts on derivatives and debt under fair value option		
(see note 6)	20.1	0.1
Other	4.5	1.9
Cash generated from operations (see note A2)	(986.7)	(1,004.4)
At the end of the year	7,466.0	7,165.0

The movements from financing activities is £375.6 million (2018: £316.7 million), which relates solely to dividend movements. Other financing movements in the statement of cash flows, such as proceeds from borrowings and repayment of borrowings, do not affect the total net debt figure as the cash generated or used in these activities offsets against the associated decrease or increase in liabilities. Of the total increase in net debt in the year, £125.5 million (2018: £112.6 million) relates to non-cash movements.

Net debt comprises borrowings, net of cash and short-term deposits, derivatives and a £40.0 million loan receivable from intermediate parent undertaking.

A4 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:

	Currency	Year of final repayment	Fair value 2019	Carrying value 2019	Fair value 2018	Carrying value 2018
Group and company			£m	£m	£m	£m
Borrowings in fair value hedge relationships			2,749.3	2.765.8	2,468.2	2,462.9
5.375% 150m bond	GBP	2018	-	-	157.9	150.8
4.25% 500m bond	EUR	2020	449.7	441.9	478.9	466.4
5.75% 375m bond	GBP	2022	424.5	406.2	435.3	411.5
2.0% 450m bond ⁽¹⁾	GBP	2025	453.1	456.7	299.6	301.5
2.867% 320m bond ⁽¹⁾	HKD	2026	31.5	32.3	-	-
2.92% 739m bond ⁽¹⁾	HKD	2026	72.7	74.9	65.9	66.9
1.129% 52m bond ⁽¹⁾	EUR	2027	45.2	46.0	45.0	44.5
2.37% 830m bond ⁽¹⁾	HKD	2027	78.7	82.0	70.6	72.4
5.625% 300m bond	GBP	2027	390.7	393.5	388.6	393.2
5.02% JPY 10bn dual currency loan	JPY/USD	2029	92.0	99.4	86.9	95.0
2.058% 30m bond ⁽¹⁾	EUR	2030	26.9	27.9	27.0	26.7
1.641% 30m bond ⁽¹⁾	EUR	2031	260.0	253.0	25.7	25.0
2.625% 250m bond ⁽¹⁾	GBP	2031	26.2	26.4	-	-
2.9% 600m bond ⁽¹⁾	HKD	2031	58.9	56.3	52.4	48.3
1.707% 28m bond ⁽¹⁾	EUR	2032	24.3	26.0	23.9	24.7
1.653% 26m bond ⁽¹⁾	EUR	2032	22.3	23.7	21.9	22.4
1.70% 30m bond ⁽¹⁾	EUR	2033	25.8	27.9	25.4	26.4
5.0% 200m bond	GBP	2035	266.8	291.7	263.3	287.2
Borrowings designated at fair value through profit or loss			373.9	373.9	347.7	347.7
6.875% 400m bond (owed to intermediate parent)	USD	2028	373.9	373.9	347.7	347.7
Borrowings measured at amortised cost			6,206.6	5,100.8	6,438.4	5,309.3
Borrowings measured at amortised cost Short-term bank borrowings - fixed	GBP	2019	6,206.6 52.0	5,100.8 52.0	6,438.4 45.0	5,309.3 45.0
•	GBP GBP	2019 2020	·			
Short-term bank borrowings - fixed			52.0	52.0	45.0	45.0
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan	GBP	2020	52.0 68.5	52.0 65.3	45.0 67.6	45.0 63.7
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan	GBP GBP	2020 2020	52.0 68.5 68.5	52.0 65.3 65.2	45.0 67.6 67.8	45.0 63.7 63.6
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan	GBP GBP GBP	2020 2020 2020	52.0 68.5 68.5 68.6	52.0 65.3 65.2 65.1	45.0 67.6 67.8 67.9	45.0 63.7 63.6 63.5
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan	GBP GBP GBP	2020 2020 2020 2020	52.0 68.5 68.5 68.6 68.6	52.0 65.3 65.2 65.1 65.1	45.0 67.6 67.8 67.9 67.9	45.0 63.7 63.6 63.5 63.4
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan	GBP GBP GBP GBP	2020 2020 2020 2020 2020	52.0 68.5 68.5 68.6 68.6	52.0 65.3 65.2 65.1 65.1 65.0	45.0 67.6 67.8 67.9 67.9	45.0 63.7 63.6 63.5 63.4 63.4
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan	GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020	52.0 68.5 68.5 68.6 68.6 68.6	52.0 65.3 65.2 65.1 65.1 65.0 64.9	45.0 67.6 67.8 67.9 67.9 67.9	45.0 63.7 63.6 63.5 63.4 63.4 63.3
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan	GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020	52.0 68.5 68.5 68.6 68.6 68.6 68.4 68.6	52.0 65.3 65.2 65.1 65.1 65.0 64.9	45.0 67.6 67.8 67.9 67.9 67.9 67.7	45.0 63.7 63.6 63.5 63.4 63.4 63.3
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan	GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.6 68.4 68.6 69.0	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8	45.0 67.6 67.8 67.9 67.9 67.9 67.7 68.0 68.6	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan	GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9	45.0 67.6 67.8 67.9 67.9 67.9 67.7 68.0 68.6 102.6	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan	GBP GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0	45.0 67.6 67.8 67.9 67.9 67.9 67.7 68.0 68.6 102.6 117.9	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2 100.0
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m Ioan 0.47% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan	GBP GBP GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2 100.0 112.2 107.9
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾	GBP GBP GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m Ioan 0.47% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan	GBP GBP GBP GBP GBP GBP GBP GBP GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1	45.0 63.7 63.6 63.5 63.4 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.6 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.29% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5 49.7	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1 45.7	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2 53.4	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2 48.8
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.29% + RPI 50m EIB (amortising) IL loan 1.12% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.29% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5 49.7 49.7 50.3	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1 45.7 45.7	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2 53.4 52.6 52.5 52.9	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2 48.8
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.29% + RPI 50m EIB (amortising) IL loan 1.12% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5 49.7 49.7	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1 45.7	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2 53.4 52.6 52.5	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2 48.8 48.8
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.49% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.29% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5 49.7 49.7 50.3	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1 45.7 45.7	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2 53.4 52.6 52.5 52.9	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2 48.8 48.8
Short-term bank borrowings - fixed 1.61% + RPI 50m EIB IL loan 1.73% + RPI 50m EIB IL loan 1.84% + RPI 50m EIB IL loan 1.90% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.93% + RPI 50m EIB IL loan 1.88% + RPI 50m EIB IL loan 2.10% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 2.46% + RPI 50m EIB IL loan 0.80% + LIBOR 100m loan 0.47% + RPI 100m IL loan 0.013% + RPI 25m IL bond ⁽¹⁾ 0.1275% + RPI 100m IL loan 0.01% + RPI 20m IL bond ⁽¹⁾ 1.23% + RPI 50m EIB (amortising) IL loan 1.12% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan 1.10% + RPI 50m EIB (amortising) IL loan 0.75% + RPI 50m EIB (amortising) IL loan	GBP	2020 2020 2020 2020 2020 2020 2020 202	52.0 68.5 68.5 68.6 68.6 68.4 68.6 69.0 102.6 121.3 120.3 29.9 117.5 23.4 48.1 50.5 49.7 49.7 50.3 50.3	52.0 65.3 65.2 65.1 65.1 65.0 64.9 64.8 64.9 100.0 115.0 110.7 27.6 109.2 23.2 44.2 46.1 45.7 45.7 46.8 46.6	45.0 67.6 67.8 67.9 67.9 67.7 68.0 68.6 102.6 117.9 116.2 28.1 111.7 22.1 51.2 53.4 52.6 52.5 52.9 52.8	45.0 63.7 63.6 63.5 63.4 63.3 63.2 63.2 100.0 112.2 107.9 26.9 106.5 22.9 47.4 49.2 48.8 49.8 49.6

A4 Borrowings (continued)

A4 Borrowings (continued)						
3. (Year of final	Fair value	Carrying value	Fair value	Carrying value
Borrowings measured at amortised cost (continued)	Currency	repayment	2019	2019	2018	2018
40						
0.245% + CPI 20m IL bond ⁽¹⁾	GBP	2031	21.2	21.0	20.3	20.6
0.01% + RPI 38m IL bond ⁽¹⁾	GBP	2031	44.7	43.3	42.4	42.6
3.375% + RPI 50m IL bond	GBP	2032	126.2	79.5	122.4	76.9
0.709% + LIBOR 100m EIB (amortising) loan	GBP	2032	81.0	81.2	86.6	87.5
0.691% + LIBOR 150m EIB (amortising) loan	GBP	2032	126.0	126.6	134.4	135.9
0.573% + LIBOR 100m EIB (amortising) loan	GBP	2033	86.4	87.5	92.0	93.8
0.511% + LIBOR 150m EIB (amortising) loan	GBP	2033	133.6	135.9	141.6	145.3
0.01% + RPI 100m EIB (amortising) IL loan	GBP	2033	106.7	102.2	109.6	106.4
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	80.0	76.6	82.2	79.7
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	82.3	78.7	81.8	79.3
0.01% + RPI 75m EIB (amortising) IL loan	GBP	2034	82.3	78.7	81.8	79.3
1.9799% + RPI 100m IL bond	GBP	2035	217.8	148.6	208.3	143.9
0.873%+LIBOR 100m EIB (amortising) loan	GBP	2035	100.6	100.0	99.6	100.0
0.840%+LIBOR 75m EIB (amortising) loan	GBP	2035	75.9	75.0	75.2	75.0
0.01% + RPI 26.5m IL bond ⁽¹⁾	GBP	2036	31.7	33.2	30.1	31.8
0.379% + CPI 20m IL bond ⁽¹⁾	GBP	2036	21.3	21.0	20.7	20.6
0.01% + RPI 29m IL bond ⁽¹⁾	GBP	2036	34.6	32.3	32.9	32.5
0.093% + CPI 60m IL bond ⁽¹⁾	GBP	2037	60.6	62.5	58.8	61.4
1.66% + RPI 35m IL bond	GBP	2037	62.9	47.7	61.9	46.5
2.40% + RPI 70m IL bond	GBP	2039	138.0	93.0	135.9	90.7
1.7829% + RPI 100m IL bond	GBP	2040	221.9	147.0	219.0	142.4
1.3258% + RPI 50m IL bond	GBP	2041	102.9	73.4	100.7	71.1
1.5802% + RPI 100m IL bond	GBP	2042	215.5	146.6	214.7	142.0
1.5366% + RPI 50m IL bond	GBP	2043	43.6	29.2	43.2	28.3
1.397% + RPI 50m IL bond	GBP	2046	109.3	73.3	109.1	71.0
0.359% + CPI 32m IL bond ⁽¹⁾	GBP	2048	32.3	32.9	32.0	32.4
1.7937% + RPI 50m IL bond	GBP	2049	122.9	72.9	122.9	70.7
Commission for New Towns (amortising) loan – fixed	GBP	2053	54.6	27.4	56.2	27.9
1.847% + RPI 100m IL bond	GBP	2056	229.9	143.9	232.2	140.3
1.815% + RPI 100m IL bond	GBP	2056	228.0	143.3	231.7	139.8
1.662% + RPI 100m IL bond	GBP	2056	221.6	143.0	222.0	139.5
1.5865% + RPI 50m IL bond	GBP	2056	109.3	71.5	109.2	69.7
1.591% + RPI 25m IL bond	GBP	2056	54.6	35.6	54.7	34.8
1.556% + RPI 50m IL bond	GBP	2056	108.8	71.1	108.6	69.3
1.435% + RPI 50m IL bond	GBP	2056	106.1	70.8	105.9	69.1
1.3805% + RPI 35m IL bond	GBP	2056	73.5	49.6	73.5	48.4
1.585% + RPI 100m IL bond	GBP	2057	215.3	137.6	218.9	134.2
0.387% + CPI 33m IL bond ⁽¹⁾	GBP	2057	32.3	33.6	33.2	33.0
1.702% + RPI 50m IL bond	GBP	2057	111.2	69.4	112.9	67.7
Preference shares (owed to immediate parent undertaking)	GBP	2099		130.0	130.0	130.0
Amounts owed to intermediate parent undertaking	GBP	Various	130.0	396.0	627.5	627.5
Book overdrafts (see note 12)	GBP	2019	396.0 13.4	13.4	11.6	11.6
			9,329.8	8,240.5	9,254.3	8,119.9
	-		0,020.0	J,= 10.0	5,257.0	5,

 $^{^{(1)}}$ For the company these borrowings relate to amounts owed to subsidiary undertakings on terms identical to those of the bonds held by United Utilities Water Finance PLC.

A4 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 the 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 table are unsecured. Funding raised in foreign currencies is swapped to sterling to match funding costs to income.

During the year, the group issued a further £150 million fixed rate notes in addition to the £300m fixed rate notes issued in the prior year. These notes were issued under the same terms with year of final repayment being 2025 and coupon rate of 2.0%.

In April 2019, the group increased its CPI-linked debt by executing a £100 million CPI-linked bank loan with a 10-year maturity. This has not been recorded in the financial statements at 31 March 2019 as it represents a non-adjusting event after the reporting period.

A5 Financial risk management

Risk management

The board (or as appropriate the UUG board) is responsible for treasury strategy and governance, which is reviewed on an annual basis.

The UUG 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 UUG 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 UUG treasury committee, which details the status of the group's compliance with treasury policies and highlights the level of risk against the appropriate risk limits in place.

The 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 board approved duration range set with reference to overall UUG policy parameters. Liquidity is actively monitored by the treasury function and is reported monthly to the UUG treasury committee through the operational compliance report.

At 31 March 2019, the group and company had £891.2 million (2018: £1,025 million) of available liquidity, which comprised £325.8 million cash and short-term deposits (2018: £499.6 million), £565.4 million (2018: £525.4 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 and company	2019 £m	2018 £m
Expiring within one year Expiring after one year but in less than two years (1) Expiring after more than two years	80.0 334.0 435	80.0 260.0 315.0
Total borrowing facilities	849.0	655.0
Facilities drawn ⁽²⁾	(283.6)	(129.6)
Undrawn borrowing facilities	565.4	525.4

Note

These facilities are arranged on a bilateral rather than a syndicated basis, which spreads the maturities more evenly over a longer time period, thereby reducing the refinancing risk by providing several renewal points rather than a large single refinancing point.

⁽¹⁾ Figure includes £294 million (2018: £140.0 million) facility provided by intermediate parent undertaking.

⁽²⁾ Facilities drawn are provided by the intermediate parent undertaking, expiring after one year but in less than two years.

A5 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 the 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.

			1 year	1-2	2-3	3-4	4-5	More than 5
Group and company	Total ⁽¹⁾	Adjustment ⁽²⁾	or less	years	years	years	years	years
At 31 March 2019	£m	£m	£m	£m	£m	£m	£m	£m
Bonds	7,966.2		589.0	83.1	459.2	63.7	64.8	6,706.4
Bonds – UUWF	1,794.4		25.4	25.4	25.3	25.3	25.3	1,667.7
Bank and other term borrowings	2,841.1		126.4	680.4	125.1	356.1	125.4	1,427.7
Preference shares	130.0		130.0	-	-	-	-	-
Parent borrowings	865.9		36.3	405.4	20.4	20.2	20.0	363.6
Adjustment to carrying value(2)	(5,357.1)	(5,357.1)						
Borrowings	8,240.5	(5,357.1)	907.1	1,194.3	630.0	465.3	235.5	10,165.4
Derivatives:								
Payable	1,364.3		485.5	43.7	36.6	32.6	30.1	735.8
Receivable	(1,799.9)		(581.9)	(71.5)	(70.2)	(93.8)	(64.7)	(917.8)
Adjustment to carrying value ⁽²⁾	26.9	26.9						
Derivatives – net assets	(408.7)	26.9	(96.4)	(27.8)	(33.6)	(61.2)	(34.6)	(182.0)
								More
O	T - 4 - 1(1)	A .1	1 year	1-2	2-3	3-4	4-5	than 5
Group and company	Total ⁽¹⁾	Adjustment ⁽²⁾	or less	years	years	years	years	years
At 31 March 2018	£m	£m	£m	£m	£m	£m	£m	£m
Bonds	8,208.4		258.2	552.0	83.3	459.4	63.9	6,791.6
Bonds – UUWF	1,252.0		14.6	14.5	14.5	14.5	14.5	1,179.4
Bank and other term borrowings	3,001.5		171.6	125.2	682.5	124.5	355.3	1,542.4
Preference shares	•							•
1 TOTOTOTIOG GITATOG	130.0		130.0	-	-	-	-	-
Parent horrowings	130.0 1,073.8		130.0 420.8	- 199.7	- 69.0	- 18.6	- 18.4	347.3
Parent borrowings Adjustment to carrying value ⁽²⁾		(5,545.8)						347.3
Adjustment to carrying value ⁽²⁾	1,073.8	(5,545.8) (5,545.8)						347.3 9,860.7
· ·	1,073.8 (5,545.8)		420.8	199.7	69.0	18.6	18.4	
Adjustment to carrying value ⁽²⁾	1,073.8 (5,545.8)		420.8	199.7	69.0	18.6	18.4	
Adjustment to carrying value ⁽²⁾ Borrowings	1,073.8 (5,545.8)		420.8	199.7	69.0	18.6	18.4	
Adjustment to carrying value ⁽²⁾ Borrowings Derivatives:	1,073.8 (5,545.8) 8,119.9		420.8 995.2	199.7 891.4	69.0 849.3	18.6 617.0	18.4 452.1	9,860.7
Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable	1,073.8 (5,545.8) 8,119.9		995.2 56.3	199.7 891.4 475.6	69.0 849.3 28.6	18.6 617.0 22.4	18.4 452.1 19.7	9,860.7
Adjustment to carrying value ⁽²⁾ Borrowings Derivatives: Payable Receivable	1,073.8 (5,545.8) 8,119.9 1,034.4 (1,416.5)	(5,545.8)	995.2 56.3	199.7 891.4 475.6	69.0 849.3 28.6	18.6 617.0 22.4	18.4 452.1 19.7	9,860.7

Notes

For the company, those bonds with United Utilities Water Finance PLC represent amounts owed to subsidiary undertakings.

⁽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.

A5 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 exchange 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 and company do not believe they are exposed to any material concentrations that could have an impact on their 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 are limited due to the majority of the group's customer base consisting of a large number of unrelated households. 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 to 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 group's retail customers are on 30 day credit terms in respect of trading transactions. As at 31 March 2019, Water Plus was the group's single largest debtor, with amounts outstanding in relation to wholesale services of £39.1 million (2018: £42.2 million). During the year, sales to Water Plus in relation to wholesale services were £454.8 million (2018: £500.1 million). Details of transactions with Water Plus can be found in note A7.

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 11). An allowance is made by the water regulator in the price limits at each price review for a proportion of debt deemed to be irrecoverable.

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 cash flows. In addition, potential derivative exposure limits are also 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 2019 and 31 March 2018, 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 and company	2019 £m	2018 £m
Cash and short-term deposits (see note 12) Trade and other receivables (see note 11) Derivative financial instruments	325.8 401.3 488.5	499.6 398.0 516.3
	1,215.6	1,413.9

A5 Financial risk management (continued)

Credit risk (continued)

The credit exposure on derivatives is disclosed gross of any collateral held. At 31 March 2019, the group and company held £52.0 million (2018: £45.2 million) as collateral in relation to derivative financial instruments (included within short-term bank borrowings - fixed in note A4).

Market risk

The group and company'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. Currently the group's regulatory assets are linked to RPI inflation, however, following Ofwat's decision to transition to the use of CPIH for inflation indexation for the 2020-25 regulatory period, from 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 mostly in RPI-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 indexlinked 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 RPI-linked debt to CPI after the reporting period as described in note 22. 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 was £3,775.8 million at 31 March 2019 (2018: £3,729.8 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.

Increase/(decrease) in profit before tax and equity

	2019	2018
Group and company	£m	£m
1 per cent increase in RPI/CPI 1 per cent decrease in RPI/CPI	(38.2) 38.2	(37.7) 37.7

A5 Financial risk management (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.

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).

In the next regulatory period, Ofwat intends to continue using materially the same methodology in setting a fixed real cost of debt in relation to embedded debt (currently assumed to be 70 per cent of net debt), but will introduce a debt indexation mechanism in relation to new debt (currently assumed to be 30 per cent of net debt).

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, mirroring Ofwat's expected split of 70 per cent embedded and 30 per cent new debt. As such, at the start of each regulatory period, around 30 per cent of the projected nominal net debt for that regulatory period will remain floating until it is fixed via the above 10-year reducing balance basis, which should more closely mirror 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 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.

Increase/(decrease) in profit before tax and equity

Group and company	2019 £m	2018 £m
1 per cent increase in interest rate 1 per cent decrease in interest rate	125.2 (136.3)	126.5 (136.7)

A5 Financial risk management (continued)

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 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.

Repricing analysis

The following tables categorise the group and company's borrowings, derivatives and cash deposits on the basis of when they reprice or, if earlier, mature. The £130.0 million redeemable preference shares have been classified as more than five years according to their latest redemption date of 1 October 2099.

The repricing analysis demonstrates the group and company'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.

Group and company	Total	1 year or less	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years
At 31 March 2019	£m	£m	£m	£m	£m	£m	£m
Borrowings in fair value hed relationships	lge						
Fixed rate instruments Effect of swaps	2,765.8	441.9 2,323.9	-	406.2 (406.2)	-	- - (1,917.7 (1,917.7)
	2,765.8	2,765.8	-	-	-	-	-
Borrowings designated at favalue through profit or loss	air						
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	209.4	52.6	0.6	0.7	0.7	0.7	154.1
Floating rate instruments	1,115.6	1,115.6	-	-	-	-	-
Index-linked instruments	3,775.8	3,775.8				<u>-</u>	
	5,100.8	4,944.0	0.6	0.7	0.7	0.7	154.1
Effect of fixed interest rate swaps		(2,330.9)	148.5	50.0	164.5	575.0	1,392.9
Total borrowings	8,240.5	5,752.8	149.1	50.7	165.2	575.7	1,547.0
Cash and short-term deposits	(325.8)	(325.8)		-	-		-
Net borrowings	7,914.7	5,427.0	149.1	50.7	165.2	575.7	1,547.0

A5 Financial risk management (continued)

Repricing analysis (continued)

At 31 March 2018	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
Borrowings in fair value hed	lge						
Fixed rate instruments Effect of swaps	2,462.9	150.8 2,312.1	466.4 (466.4)	-	411.5 (411.5)	-	1,434.2 (1,434.2)
	2,462.9	2,462.9	-		-	-	-
Borrowings designated at favalue through profit or loss	nir						
Fixed rate instruments	347.7		-	-	-	-	347.7
Effect of swaps		347.7					(347.7)
	347.7	347.7					
Borrowings measured at amortised cost							
Fixed rate instruments	203.0	45.6	0.6	0.6	0.7	8.0	154.7
Floating rate instruments Index-linked instruments	1,376.5 3,729.8	1,376.5 3,729.8					
	5,309.3	5,151.9	0.6	0.6	0.7	0.8	154.7
Effect of fixed interest rate							
swaps		(3,006.3)	925.4	252.1	50.0	164.5	1,614.3
Total borrowings	8,119.9	4,956.2	926.0	252.7	50.7	165.3	1,769.0
Cash and short-term deposits	(499.6)	_(499.6)					
Net borrowings	7,620.3	4,456.6	926.0	252.7	50.7	165.3	1,769.0

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 substantial proportion of its anticipated net electricity usage out to the end of the AMP in 2020 and has begun fixing prices for the subsequent AMP from 2020 to 2025, partially through entering into electricity swap contracts.

The adoption of IFRS 9 'Financial Instruments' has enabled the group to designate electricity swaps into 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 reflecting the effective portion of the swaps being recognised in other comprehensive income. As a result of this, changes in electricity prices are no longer significant sources of volatility in the income statement and therefore sensitivity analysis in this area will no longer be meaningful.

A5 Financial risk management (continued)

Currency risk

Currency exposure principally arises in respect of funding raised in foreign currencies.

To manage exposure to currency rates, foreign currency debt is hedged into sterling through the use of cross currency swaps and these are typically designated within a fair value accounting hedge.

The group seeks to manage its risk by maintaining currency exposure within UUG board approved limits. Currency risk in relation to foreign currency denominated financial instruments is reported monthly to the UUG treasury committee through the operational compliance report.

The group and company have no material net exposure to movements in currency rates.

Capital risk management

The group's objective when managing capital is to maintain efficient access to debt capital markets throughout the economic cycle.

Assuming no significant changes to existing rating agencies' methodologies or sector risk assessments, the company aims to maintain, as a minimum, credit ratings of A3 with Moody's Investors Service (Moody's) and BBB+ with Standard & Poor's Ratings Services (Standard & Poor's) for the company and debt issued by its financing subsidiary, United Utilities Water Finance PLC.

In order to maintain its targeted minimum credit ratings, the group needs to manage its capital structure with reference to ratings methodology and measures used by Moody's and Standard & Poor's. The ratings methodology is normally based on a number of key ratios (such as RCV gearing, adjusted interest cover and Funds from Operations (FFO) to debt) and threshold levels as updated and published from time to time by Moody's and Standard & Poor's. The group looks to manage its risk by maintaining the relevant key financial ratios used by the credit rating agencies to determine a corporate's credit rating, within the thresholds approved by the board. Capital risk is reported monthly to the UUG 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.

A5 Financial risk management (continued)

Fair values

The table below sets out the valuation basis of financial instruments held at fair value and financial instruments where fair value has been separately disclosed in the notes as the carrying value is not a reasonable approximation of fair value.

Group and company				
At 31 March 2019	Level 1	Level 2	Level 3	Total
	£m	£m	£m	£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⁾	-	157.9		157.9
Derivative financial assets – cash flow hedge ⁽²⁾	-	1.2	-	1.2
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⁾		(75.7)	-	(75.7)
Derivative financial liabilities – cash flow hedge	(2)	(1.7)	-	(1.7)
Financial liabilities designated as fair value				
through profit or loss	-	(373.9)	-	(373.9)
Financial liabilities 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)	(5,525.7)	-	(6,206.6)
	(2,997.8)	(5,923.2)	-	(8,921.0)
At 31 March 2018	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value through	2111	2111	2111	2111
profit or loss				
Derivative financial assets – fair value hedge	_	337.3	_	337.3
Derivative financial assets – held for trading ⁽¹⁾	_	179.0	_	179.0
Financial liabilities at fair value through		170.0		170.0
profit or loss				
profit or loss Derivative financial liabilities – fair value hedge	_	(24.2)	_	(24.2)
Derivative financial liabilities – fair value hedge		(24.2) (76.8)	- -	(24.2) (76.8)
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾		(24.2) (76.8)	- -	(24.2) (76.8)
Derivative financial liabilities – fair value hedge			-	
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Financial liabilities designated as fair value through profit or loss Financial liabilities for which fair value has been disclosed		(76.8)	- -	(76.8)
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Financial liabilities designated as fair value through profit or loss Financial liabilities for which fair value has been disclosed Financial liabilities in fair value hedge		(76.8)	- -	(76.8)
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Financial liabilities designated as fair value through profit or loss Financial liabilities for which fair value has been disclosed		(76.8)	-	(76.8)
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Financial liabilities designated as fair value through profit or loss Financial liabilities for which fair value has been disclosed Financial liabilities in fair value hedge)(2) _	(347.7)	-	(76.8)
Derivative financial liabilities – fair value hedge Derivative financial liabilities – held for trading ⁽¹⁾ Financial liabilities designated as fair value through profit or loss Financial liabilities for which fair value has been disclosed Financial liabilities in fair value hedge relationships	(2,192.4)	(76.8) (347.7) (275.8)	- - -	(76.8) (347.7) (2,468.2)

Notes:

⁽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 £151.3 million (2018: £151.8 million).

⁽²⁾ On adoption of IFRS 9 'Financial Instruments', electricity swaps, previously classified as held for trading under IAS 39 'Financial Instruments: Recognition and Measurement', have been designated in cash flow hedge relationships.

A5 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).

The group has calculated fair values using quoted prices where an active market exists, which has resulted in £2,997.8 million (2018: £4,618.0 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 £1,620.2 million decrease (2018: £2,714.4 million increase) 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 2019.

During the year, changes in the fair value of financial liabilities designated at fair value through profit or loss resulted in a £26.2 million loss (2018: £27.8 million gain). Included within this was a £6.6 million gain (2018: £24.0 million loss) attributable to changes in own credit risk. Following adoption of IFRS 9 'Financial Instruments', this £6.6 million gain has been recognised in other comprehensive income rather than profit or loss. The cumulative amount due to changes in credit spread was £44.8 million profit (2018: £38.2 million profit). The carrying amount is £147.8 million (2018: £145.6 million) higher than the amount contracted to settle on maturity.

A6 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.

In the year ended 31 March 2019, 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 is a consequence of an increase in future service costs and is intended to reduce the overall costs and risk to the group whilst balancing the interests of employees by maintaining an element of defined benefit pension provision.

The group also 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.

Information about the pension arrangements for executive directors is contained in the directors' remuneration report.

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.

A6 Retirement benefits (continued)

The defined benefit obligation includes benefits for current employees, former employees and current pensioners as analysed in the table below:

	2019	2018
Group and company	£m	£m
Total value of current employees benefits	699.0	847.8
Deferred members benefits	372.0	429.2
Pensioner members benefits	1,460.8	1,323.3
Total defined benefit obligation	2,531.8	2,600.3

The duration of the combined schemes is around 18 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 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 2019 and 31 March 2018 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 time-scale has been accelerated, with accelerated deficit repair contributions of £80.5 million and £0.9 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 there should be minimal ongoing reliance on the company by the pension schemes.

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.

A6 Retirement benefits (continued)

Funding requirements (continued)

In addition, in the year ended 31 March 2019, 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. As a consequence, the Inflation Funding Mechanism (IFM), which previously provided an element of inflation hedging directly with the company, has now ceased to apply and, therefore, no IFM payments were made during the year. 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 £7.0 million in the year ending 31 March 2020, £6.3 million and £0.5 million in respect of current service contributions to UUPS and ESPS respectively, and £0.2 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. Due to the IFM ceasing to exist, as mentioned in the previous section, 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.

In contrast, the schemes' specific funding bases, which form 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 2019, the discount rate decreased by 0.2 per cent (2018: 0.05 per cent increase), which includes a 0.1 per cent decrease in credit spreads and a 0.1 per cent decrease in gilt yields over the year. The IAS 19 remeasurement gain of £68.3 million (2018: £34.6 million) reported in note 14 has largely resulted from the favourable impact of updated membership data due to the 2018 funding valuation, changes in mortality assumptions, and growth asset gains, partially offset by the reduction in credit spreads and gilt yields during the year.

A6 Retirement benefits (continued)

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, resulting in an overall increase in the pension liability of £5.5 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 OCI 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 2019, 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:

	2019	2018
	% p.a.	% p.a.
Discount rate	2.40	2.60
Pensionable salary growth and pension increases	3.45	3.35
Price inflation - RPI	3.45	3.35
Price inflation - CPI	2.05	1.95

The discount rate represents a high quality corporate bond rate with 2.40% being equivalent to gilts plus 90 basis points (31 March 2018: 2.60% being equivalent to gilts plus 100 basis points).

Demographic assumptions

At both 31 March 2019 and 31 March 2018, mortality in retirement is assumed to be in line with the Continuous Mortality Investigation's (CMI) S2PA year of birth tables, with 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 (2018: 108 per cent for males and 102 per cent for females), reflecting actual mortality experience. At 31 March 2019, mortality in retirement is based on CMI 2018 (2018: CMI 2016) long-term improvement factors, with a long-term annual rate of improvement of 1.50 per cent (2018: 1.75 per cent).

The current life expectancies at age 60 underlying the value of the accrued liabilities for the schemes are:

	2019	2018
	years	years
Retired member – male	26.4	27.0
Non-retired member – male	27.5	28.7
Retired member – female	28.6	29.4
Non-retired member – female	30.0	31.1

A6 Retirement benefits (continued)

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, whilst all other assumptions are held constant. This approach does not take into account the inter-relationship 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 0.1 per cent would have resulted in a £54.9 million (2018: £55.0 million) decrease/increase in the schemes' liabilities at 31 March 2019, although as long as credit spreads remain stable this will be largely offset by an increase 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.

Price inflation

An increase/decrease in the inflation assumption of 0.1 per cent would have resulted in a £51.3 million (2018: £51.5 million) increase/decrease in the schemes' liabilities at 31 March 2019, as a significant proportion of the schemes' benefit obligations are linked to inflation. However, around half of the schemes' liabilities were hedged for RPI in the external market at 31 March 2019, meaning that this sensitivity is likely to be halved as a result. As assumptions for pensionable salary growth and pension increases are in line with those for price inflation, sensitivities are also in line.

Mortality long-term improvement rate

An increase in the mortality long-term improvement rate to 1.75 per cent would have resulted in a £28.3 million decrease in the schemes' liabilities at 31 March 2019.

Life expectancy

An increase/decrease in life expectancy of one year would have resulted in a £101.5 million (2018: £95.6 million) increase/decrease in the schemes' liabilities at 31 March 2019. 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 %	2019 £m	Schemes' assets %	2018 £m
Equities Other non-equity growth assets Gilts Bonds Other	7.6 33.3 46.1 13.0	0.7 221.8 967.3 1,339.0 376.8	10.5 5.3 48.2 39.6 (3.6)	301.3 152.4 1,380.3 1,135.7 (105.3)
Total fair value of schemes' assets Present value of defined benefit obligations	100.0	2,905.6 (2,531.8)	100.0	2,864.4 (2,600.3)
Net retirement benefit surplus		373.8	:	264.1

A6 Retirement benefits (continued)

Further reporting analysis (continued)

The fair values in the table above are all based on quoted prices in an active market, with the exception of £168.7 million (2018: £124.3 million) of assets included in 'Other', which fall within the 'Level 3' fair value categorisation in accordance with IFRS 13 'Fair Value Measurement'.

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 and company At 31 March 2019	Underlying assets £m	Fair value of derivatives £m	Combined £m
Equities Other non-equity growth assets Gilts Bonds Other	4.0 221.8 967.3 1,352.9 282.4	(3.3) - - (13.9) 94.4	0.7 221.8 967.3 1,339.0 376.8
Total fair value of schemes' assets	2,828.4	77.2 	2,905.6
At 31 March 2018			
Equities Other non-equity growth assets Gilts Bonds Other	295.8 152.4 1,380.3 1,137.5 131.3	5.5 - (1.8) (236.6)	301.3 152.4 1,380.3 1,135.7 (105.3)
Total fair value of schemes' assets	3,097.3	(232.9)	2,864.4

The derivative values in the tables above represent the net market value of derivatives held within each of these asset categories as follows:

- Derivatives are held within the UUPS equity portfolio to gain economic exposure equivalent to around 4.0 per cent of that scheme's assets, and comprises total return swaps on equity indices with a value of £nil (2018: £3.9 million) and currency forwards with a value of £(3.3) million (2018: £1.6 million);
- Derivatives are used within both the UUPS and ESPS bond portfolio to hedge non-sterling exposure back to sterling:
 - the UUPS value comprises credit default swaps with a value of £nil (2018: £nil), interest rate swaps with a value of £(12.4) million (2018: £(3.2) million) and currency forwards with a value of £(1.8) million (2018: £0.9 million); and
 - the ESPS total value of £0.3 million (2018: £0.5 million) relates to interest rate swaps.

A6 Retirement benefits (continued)

Further reporting analysis (continued)

- 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 £93.3 million (2018: £(236.7) million) in the UUPS and £1.1 million (2018: £0.1 million) in the ESPS. These are further broken down as follows:
 - the UUPS has a liability hedging strategy in place, which uses a wide range of derivatives to target a high level of interest rate and inflation hedging. The net value of £93.3 million (2018: £(236.7) million) comprises asset swaps with a value of £(27.1) million (2018: £(22.6) million), interest rate swaps with a value of £118.9 million (2018: £208.7 million), gilt repurchase agreements with a value of £nil (2018: £(428.2) million) and RPI inflation swaps with a value of £1.5 million (2018: £5.4 million).
 - the ESPS value of £1.1 million (2018: £0.1 million) represents gilt repurchase agreements with a value of £1.2 million (2018: £0.4 million) and RPI inflation swaps with a value of £(0.1) million (2018: £(0.3) million).

The derivatives shown in the tables only cover those expressly held for the purpose of reducing certain undesirable asset and liability risks. The schemes also 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 £453.2 million (2018: £440.9 million).

Movements in the fair value of the schemes' assets were as follows:

	2019 £m	2018 £m
At the start of the year	2,864.4	2,876.6
Interest income on schemes' assets	73.4	72.7
The return on plan assets, excluding amounts included in interest	47.1	(46.5)
Member contributions	2.5	4.7
Benefits paid	(128.8)	(100.4)
Administrative expenses	(1.8)	(1.8)
Group contributions	48.8	59.1
At the end of the year	2,905.6	2,864.4

The group's actual return on the schemes' assets was a gain of £120.5 million (2018: £26.2 million), principally due to gains on derivatives hedging the schemes' liabilities.

A6 Retirement benefits (continued)

Further reporting analysis (continued)

Movements in the present value of the defined benefit obligations are as follows:

	2019 £m	2018 £m
At the start of the year	(2,600.3)	(2,682.1)
Interest cost on schemes' obligations	(66.1)	(67.2)
Actuarial (losses)/gains arising from changes in financial assumptions	(121.7)	63.3
Actuarial gains arising from changes in demographic assumptions	50.2	31.6
Actuarial gains/(losses) arising from experience	92.7	(13.8)
Curtailments/settlements	(7.8)	(2.2)
Member contributions	(2.5)	(4.7)
Benefits paid	128.8	100.4
Current service cost	(5.1)	(25.6)
At the end of the year	(2,531.8)	(2,600.3)

A7 Related party transactions

The aggregate disclosable transactions between the UUW group and company and the related parties in the wider UUG group of companies were as follows:

	Sales of goods and services Purchase of goods and services		Recharge of costs to/(by) related parties at nil margin			
Group	2019 £m	2018 £m	2019 £m	2018 £m	2019 £m	2018 £m
Ultimate parent undertaking Intermediate parent undertaking Fellow subsidiaries Joint ventures of the UUG group	- - - 454.8	- - 495.4	3.3 -	2.6 0.7	(3.8) 0.6 2.3 0.2	(3.2) 0.8 2.7 1.4
	454.8	495.4	3.3	3.3	(0.7)	1.7

Sales of services to related parties during the year mainly represent non-household wholesale charges to Water Plus Group Limited (Water Plus), a joint venture in which the UUG group holds a 50 per cent stake alongside Severn Trent PLC, billed and accrued during the period. These transactions were on the UUG group's normal trading terms in respect of non-household wholesale charges, which are governed by the wholesale charging rules issued by Ofwat.

In addition to the above, £0.5 million (2018: £nil) of charitable contributions advanced 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.

Details of transactions with key management are disclosed in note 3.

In addition to the above, £2.4 million (2018: £2.0 million) of interest income was recognised on loans to joint ventures of the UUG group.

A7 Related party transactions (continued)

Company

In addition to the above amounts, the company incurred interest charges of £24.4 million (2018: £15.6 million) in relation to the amounts owed to its subsidiary, United Utilities Water Finance PLC (UUWF), which represent external borrowings held by UUWF that are on-lent to the company on identical terms to those borrowings owed by UUWF to external parties (see below). The company also incurred a management fee of £0.1 million (2018: £0.1 million) in relation to the services provided by UUWF.

Furthermore the company incurred estate management charges of £0.7 million (2018: £0.7 million) in relation to transactions with its subsidiary Lingley Mere Management Company Limited.

The following amounts were outstanding at the reporting date:

	Amounts related	Amounts owed to related parties		
Group	2019 £m	2018 £m	2019 £m	2018 £m
Ultimate parent undertaking Intermediate parent undertaking Immediate parent undertaking Fellow subsidiaries	- 60.1 - 1.0	- 45.4 - 0.7	2.0 770.1 130.0	1.8 975.5 130.0 0.1
Joint ventures of the UUG group	139.2	142.2	0.6	0.1
	200.3	188.3	902.7	1,108.2

At 31 March 2019, amounts owed by related parties were £200.2 million (2018: £188.3 million), comprising £60.2 million (2018: £48.3 million) of trade balances and £140.0 million (2018: £140.0 million) relating to loans.

Trade balances are unsecured and will be settled in accordance with normal credit terms. Included within these balances was £39.2 million (2018: £42.2 million) owed by Water Plus and £21.1 million (2018: £6.1 million) owed by the group's intermediate parent company and fellow subsidiaries of the UUG group.

Included within these loans receivable was £100.0 million (2018: £100.0 million) owed by Water Plus on a £100.0 million revolving credit facility, which is guaranteed by United Utilities PLC and has a maturity date of 30 September 2020, and £40.0 million (2018: £40.0 million) owed by United Utilities PLC, which is repayable within one month. Both of these loans bear interest at LIBOR plus credit margin.

No expense or allowance has been recognised for bad and doubtful receivables in respect of the amounts owed by related parties (2018: £nil).

At 31 March 2019, amounts owed to related parties were £902.7 million (2018: £1,108.2 million), comprising £2.6 million (2018: £2.7 million) of trade balances, £769.9 million (2018: £975.2 million) of borrowings (see note 13) and its associated accrued interest of £0.2 million (2018: £0.3 million) owed to United Utilities PLC, and £130.0 million (2018: £130.0 million) relating to preference shares in the company held by United Utilities North West Limited (see notes 13 and 19).

Included within these trade balances were £0.6 million (2018: £0.8 million) owed to Water Plus and £2.0 million (2018: £1.8 million) owed to United Utilities Group PLC.

During the year, guarantees with an aggregate limit of £35.1 million (2018: £24.0 million) have been provided to the company by United Utilities PLC in respect of amounts owed by Water Plus in relation to wholesale charges.

A7 Related party transactions (continued)

Company

In addition to the amounts outstanding above, the company owed £1,502.2 million (2018: £1,021.1 million) in respect of borrowings (see note A4), and £6.3 million (2018: £4.8 million) in respect of associated accrued interest, to its subsidiary, UUWF. These amounts represent external borrowings held by UUWF, which are on-lent to the company on identical terms to those of the amounts owed to external parties. The company has guaranteed these external borrowings held by UUWF. Furthermore, the company owed £0.3 million (2018: £0.2 million) in respect of cash pooling arrangements to its intermediate parent company United Utilities PLC.

A8 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 123 to 125.

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.

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.

A8 Accounting policies (continued)

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.

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, 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.

A8 Accounting policies (continued)

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.

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 of the network is treated as additions. Amounts incurred in maintaining the operating capability of the network in accordance with defined 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.

A8 Accounting Policies (continued)

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.

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 amortised over a period of three to ten 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.

A8 Accounting Policies (continued)

Non-current assets held for sale

Non-current assets classified as held for sale are measured at the lower of carrying value and fair value less costs to sell. Non-current assets are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as having been met only when the sale is highly probable and the asset is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Financial instruments

Financial assets and financial liabilities are recognised and derecognised on the group's statement of financial position on the trade date when the group becomes/ceases to be a party to the contractual provisions of the instrument.

Cash and short-term deposits

Cash and short-term deposits include cash at bank and in hand, deposits and other short-term highly liquid investments which are readily convertible into known amounts of cash, have a maturity of three months or less from the date of acquisition and which are subject to an insignificant risk of change in value. In the consolidated statement of cash flows and related notes, cash and cash equivalents include cash and short-term deposits, net of book overdrafts.

Financial investments

Investments (other than interests in subsidiaries, joint ventures and fixed deposits) are initially measured at fair value, including transaction costs. Investments classified as financial assets measured at fair value through profit or loss (FVPL) in accordance with IFRS 9 'Financial Instruments' are measured at subsequent reporting dates at fair value. Gains and losses arising from changes in the net profit or loss for the period. The business model employed in respect of financial assets is that of a hold-to-collect model.

Trade receivables

Trade receivables are initially measured at fair value, and are subsequently measured at amortised cost, less any impairment for irrecoverable amounts. Estimated irrecoverable amounts are based on historical experience of the receivables balance.

Trade payables

Trade payables are initially measured at fair value and are subsequently measured at amortised cost.

Financial liabilities and equity

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the group after deducting all of its liabilities.

Equity instruments

Equity instruments issued by the group are recorded at the proceeds received, net of direct issue costs.

A8 Accounting Policies (continued)

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, whilse associated hedging derivatives are recognised at fair value, presents an accounting measurement mismatch that has the potential to introduce considerable volatility to both the income statement and the statement of financial position. Therefore, where feasible, the group takes advantage of the provisions under IFRS 9 'Financial Instruments' to make fair value adjustments to its borrowing instruments to reduce this volatility and better represent the economic hedges that exist between the group's borrowings and associated derivative contracts.

Where feasible, the group designates its financial instruments within fair value hedge relationships. In order to apply fair value hedge accounting, it must be demonstrated that there is an economic relationship between the borrowing instrument and the hedging derivative and that the designated hedge ratio is consistent with the group's risk management strategy.

Borrowings designated within a fair value hedge relationship

Where designated, bonds and loans are initially measured at fair value, being the cash proceeds received net of any direct issue costs. They are subsequently adjusted for any change in fair value attributable to the risk being hedged at each reporting date, with the change being charged or credited to finance expense in the income statement.

Hedge accounting is discontinued prospectively when the hedging instrument is sold, terminated or exercised, or where the hedge relationship no longer qualifies for hedge accounting.

Under the provisions of IFRS 9 'Financial Instruments', changes in the group's own credit risk are recognised in other comprehensive income.

Borrowings designated at fair value through profit or loss

Designation is made where the requirements to designate within a fair value hedge cannot be met at inception despite there being significant fair value offset between the borrowing and the hedging derivative. Where designated, bonds and loans are initially measured at fair value being the cash proceeds received and are subsequently measured at fair value at each reporting date, with changes in fair value being charged or credited to finance expense in the income statement.

Derivative financial instruments

The group's default treatment is that derivative financial instruments are measured at fair value at each reporting date, with changes in fair value being charged or credited to finance expense in the income statement. The group enters into financial derivatives contracts to manage its financial exposure to changes in market rates (see note A5).

A8 Accounting Policies (continued)

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.

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.

A8 Accounting Policies (continued)

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.

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 A5).

Grants and contributions

Grants and contributions receivable in respect of property, plant and equipment arise from a number of sources including contributions from developers towards the expansion of the water and wastewater network and connection of properties to the network. These grants and contributions are treated as deferred income, which is credited to the income statement over the estimated useful economic lives of the related assets.

Leases

Leases are classified according to the substance of the transaction. Operating leases are leases that do not transfer substantially all the risks and rewards of ownership to the lessee.

Operating lease rentals are charged to the income statement on a straight-line basis over the period of the lease.