

Kemble Water Finance Limited

Annual report and consolidated financial statements

For the year ended 31 March 2022

Contents

Introduction	2
Directors and advisors	3
Strategic report	4
Directors' report	21
Statement of directors' responsibilities in respect of the financial statements	28
Independent auditors' report to the members of Kemble Water Finance Limited	29
Consolidated income statement	36
Consolidated statement of comprehensive income	37
Consolidated statement of financial position	38
Company statement of financial position	39
Consolidated statement of changes in equity	40
Company statement of changes in equity	41
Consolidated statement of cash flows	42
Company statement of cash flows	43
Accounting policies	44
Significant accounting judgements and key sources of estimation uncertainty	58
Notes to the Group financial statements	63
Notes to the Company financial statements	105

Introduction

Kemble Water Finance Limited (“the Company” or “KWF”) is an intermediate holding company of the Kemble Water Holdings Limited Group of companies (“the KWH Group”). The Kemble Water Finance Limited Group of companies (“the Group”) represents the consolidated results of Kemble Water Finance Limited and its subsidiaries. These consolidated financial statements are prepared as a requirement of the Kemble Water Finance Limited covenants, which govern the way the Group borrows funds.

The Company acts as an intermediate holding company within the KWH Group and also acts as the borrower of funds both directly and through its direct subsidiary Thames Water (Kemble) Finance plc (“TW(K)F”) for use within the wider Group. Under these arrangements the Company has at 31 March 2022, £1,464.9 million (excluding unamortised discounts and issuance costs) of external debt of which £949.8 million (excluding unamortised discounts and issuance costs) has been raised directly by the Company and £515.1 million (excluding unamortised discounts and issuance costs) has been raised by its financing subsidiary TW(K)F and lent to the Company. This structurally subordinated secured debt is issued outside of the whole business securitisation group comprising the operating subsidiary, Thames Water Utilities Limited (TWUL), its financing subsidiary Thames Water Utilities Finance plc (TWUF) and its parent, Thames Water Utilities Holdings Limited (TWUHL). The KWF Group has £15,236.8 million (excluding unamortised discounts and issuance costs) of external debt at 31 March 2022 (excluding intercompany loan from parent).

The principal activity of the Group is the appointed supply of water and wastewater services to customers in London, the Thames Valley and surrounding area, delivered entirely through its wholly owned indirect subsidiary, Thames Water Utilities Limited (“TWUL” or “Thames Water”), in accordance with TWUL’s Licence of Appointment. References to “our” or “we” in this report relates to the activities of the Group including TWUL.

In addition, the Group operates a separately managed property business. The property business manages the Group’s property portfolio and the sale of land and other property that is no longer required by the appointed business.

As the performance of the Group is dependent largely on its appointed activities, this report makes reference to the performance of TWUL in order to provide appropriate explanation as to the performance of the overall Group.

The Group’s management structure separates the Directors of the Company, who are all Non-Executives, and have no role to play in the day-to-day running of the appointed business (although certain matters require the approval of the Company’s board having regard to the interests of its shareholders). In addition to their responsibilities to TWUL, the Executive Directors of TWUL also carry out work on behalf of the Group.

Unless otherwise stated; all current year data included in this report is for the year ended 31 March 2022 (“2021/22”).

Directors and advisors

Directors

M McNicholas
S Deeley
J Divoky
G Lambert
A Hall
P Noble
F Sheng
M Bloch-Hansen
C Pham
M Wang
G Tucker
D Wilkins
Y Deng
S Lowndes

Independent auditors

PricewaterhouseCoopers LLP
3 Forbury Place
23 Forbury Road
Reading
RG1 3JH

Company secretary and registered office

B M Swiergon
Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Strategic report

The Directors present their strategic report of the Kemble Water Finance Limited Group ("the Group") for the year ended 31 March 2022. This strategic report should be read in conjunction with the strategic report of Thames Water Utilities Limited, which does not form part of this report, which can be found at <https://www.thameswater.co.uk/about-us/investors/our-results> and provides a more detailed insight into the regulated business.

Business review

Principal Activities

The principal activity of the Group is the appointed supply of water and wastewater services to customers in London, the Thames Valley and surrounding area, delivered entirely through its wholly owned indirect subsidiary, TWUL in accordance with its Licence of Appointment.

The main functional areas to the TWUL business are:

- Retail:** comprises customer-facing activities, as well as billing and revenue collection, including amounts relating to construction of the Thames Tideway Tunnel (TTT) which has also been shown separately in the financial statements. From 1 April 2017, this business function is also responsible for billing and cash collection of wholesale market charges to licensed non-household retailers for both water and wastewater, including amounts relating to construction of the TTT which is shown separately in the financial statements;
- Capital delivery:** comprises the management of water network assets, as well as the investment in and maintenance of the business' water and wastewater infrastructure to ensure it is sufficiently resilient to continue customer delivery, whilst also meeting the challenges of population growth and climate change.
- Operations:** responsible for all aspects of raw water abstraction, treatment as well as the distribution of high quality drinking water and wastewater collection, treatment and safe disposal for household and non-household customers; and
- Support services:** responsible for other areas including digital, asset management, regulation, strategy, finance, legal and HR.

Whilst the appointed supply of water and wastewater services provides approximately 98% of the Group's appointed gross revenue, TWUL also manages certain non-appointed activities including:

- property searches, including the provision of information required by property developers; sale of gravel and other aggregates extracted through day-to-day operations; and
- treatment of trade effluent and other septic waste.

In addition, the Group operates a separately managed property business. The property business manages the Group's property portfolio and the sale of land and other property that is no longer required by the appointed business.

Business strategy

The Group's strategy is as follows:

- Deliver life's essential service, so our customers, communities and the environment can thrive. This means keeping customers' bills as low as possible whilst investing efficiently in assets to ensure its customers' needs are met now and in the future. From a shareholder perspective, this means meeting and outperforming our regulatory outputs and financial settlement to provide the returns they expect and require.
- Develop and enhance the value of land and sites that are excess to requirement

Principal risks and uncertainties

Changes to risk landscape

We face a big strategic challenge: major water and wastewater investments are required in juxtaposition with pressure on household budgets.

Over the course of 2021/22 internal and external factors have influenced this risk agenda:

Pollution, river water quality, and related environmental compliance: We've faced considerable scrutiny over our ability to demonstrate compliance with environmental permitting regulations regarding wastewater treatment works. This includes the enforcement case opened by Ofwat and investigation by the Environment Agency. We hold the view that it is unacceptable for untreated sewage to enter rivers, even when legally permitted. We've allocated an unprecedented amount of investment directed towards reducing discharges of untreated sewage, safeguarding our rivers and streams.

Changes to risk landscape (continued)

Energy costs: During the last year we have experienced a significant rise in our energy costs and energy intensive goods costs.

Inflation: Inflation has had a multipronged impact on the business, from our ability to collect revenues from customers driven by cost-of-living increases, to increased costs of our capital projects.

Supply chain: Predominantly due to Covid-19 related impacts, we are experiencing ongoing supply chain disruption, evidenced by labour shortages as well as fuel, chemical and raw materials shortages.


Emerging risks: There are a number of emerging risks on the horizon which will be a focus for further analysis in 2022/23.

- Further geopolitical tensions and threats including sanctions and conflict, and exacerbating supply chain pressures, e.g., emerging supply chain issues in China;
- Climate action failure – the economic overhang of Covid-19, a worsening macro-economic climate, and predicted increased geo-economic confrontations, limit our financial capital available for climate action and may therefore make our transition to net zero increasingly difficult.

Changes to principal risks



We've fully reviewed our principal risk model this year and now have 18 principal risks that we are managing. These are categorised across five categories linked to our strategic focus: customer; environment/ operations; people/ safety; finance/ legal; trust and strategy. The directional trend over the year is summarised in the table below and further details on how the risks are being managed can be found below.

Principal risks and uncertainties

1. We deliver a poor customer experience	
Unable to identify/ support customers in vulnerable circumstances	
<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> Trend  </div> <div> Explanation of trend Overall risk is stable. Whilst we have digitised more of our communications to improve channel choice this year and reduced complaints, we are still failing our customers far too often. When you look at any of the measures including C-MeX, D-MeX, customer satisfaction and even the thousands of complaints we are still getting, we are not meeting customer expectations. We've reset foundations last year and have started to see demonstrable improvements in performance, that in the year ahead will translate into further improvements to customer service now that some of these foundational steps are embedded. </div> </div>	
Risk impact If we are unable to deliver the levels of service expected by our customers we may experience an increase in complaints, perform relatively poorly on C-MeX and D-MeX measures, trigger an Ofwat investigation, be given penalties, and fail to achieve the necessary customer advocacy and support to secure a PR24 plan which enables us to deliver our long-term ambitions.	
How we are managing the risk Executing a company-wide C-MeX improvement plan that will improve our industry standing and delivering a data-led Customer Transformation Plan that will reimagine our customer journeys on an end-to-end basis	
<ul style="list-style-type: none"> • Investing in our website and digital channels including social media, chatbots and email to improve service and deepen our relationships with third parties to take advantage of their expertise • Reducing overall customer complaints by removing the back-office backlogs, and transitioning to a more customer-centric approach • Continuing to increase the number of customers on our Priority Services Register (PSR) and advancing our inclusivity agenda by maintaining our British Standards Institution (BSI) accreditation for our provision of inclusive services • Increasing meter penetration, and the rollout of digital smart meters – an opportunity to transform our interactions with our Household (HH), Non-Household (NHH) customers and Non-Household (NHH) retailers • Investing in marketing initiatives to improve customer perception • Changing our operating model to improve the way our customers interact with us – including bringing the majority of voice activity in-house and moving to a 'universal agent' model (enabling colleagues to support customers on billing, water, and waste calls). Enhancing our Customer Incident Management Capability and building a 'regional based' operational service model to help us build better relationships with customers and communities based on local needs so that we can make better decisions for local customers. 	


Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)

2. We fail to collect revenues from our customers	
Unable to bill or collect sufficient revenues from customers for prolonged periods	
<p>Trend</p> 	<p>Explanation of trend</p> <p>Risk has increased. Inflation has hit the highest point in 30 years, household budgets are facing enormous pressure and Citizens Advice reported the number of people they supported with energy debts in January 2022 hit 8,000+ the highest on record. Rising economic pressures experienced by UK households could pose further risks to cash collection.</p>
<p>Risk impact</p> <p>If we are unable to bill our Household (HH) customers or Non-Household (NHH) retailers accurately and in a timely fashion, there will be a shortfall in recognised income and a consequential impact on company financial performance.</p> <p>If we are unable to collect sufficient revenues from HH customers and NHH retailers, there will be a strain on company cash flow and associated covenants. There will also be an increased level of bad debt, resulting in increased operating costs (increased bad debt provisioning costs and increased collection activity).</p>	
<p>How we are managing the risk</p> <ul style="list-style-type: none"> Committed investment to deliver service improvements, which will include: <ul style="list-style-type: none"> End to end process redesign to improve customer service in key areas including billing, moving home, residency checks and payments Building self-service capability for our customers Producing clearer billing information Automating applications for our social tariffs Building digital product capacity for system changes to optimise automation. Developing leading and lagging indicators to enable further insight of portfolio. 	
3. We fail to protect biodiversity and mitigate the effect of climate change and population growth	
<ul style="list-style-type: none"> Long-lasting damage to biodiversity due to our operations Prolonged periods of no water due to drought Significant flooding events overwhelming the capacity of our assets. 	
<p>Trend</p> 	<p>Explanation of risk trend</p> <p>Overall risk is stable. We continue to deliver the required improvements as part of our Water Resources Management Plan (WRMP) to manage supply and demand. Covid has not increased population but has caused population movement and increased personal use at home. We have managed water supply and focused reductions where we can balance these changes.</p>
<p>Risk impact</p> <p>Increased frequency and severity of disruption to customers and higher cost to maintain our operational service due to extreme weather and temperature rise, eroded further by reduced headroom for water resources due to population growth. Potential for environmental damage due to over abstraction at sensitive locations such as chalk streams and loss of biodiversity.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> Effective deployment of the Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) process, which includes climate change and population forecasts in line with regulatory guidelines, with agreement through PR24 process to provide required funding Delivering demand reduction schemes such as our smart metering programme and water efficiency improvement plans Due to Covid19, we have kept a close watch on customer demand across our company to ensure we target improvements where demand has been seen to grow more, mainly due to people movement during the pandemic. Working closely with the water companies in the South East (and regulators), and others nationally to provide an overall water resources plan that meets the need whilst protecting / improving environment and resilience Both demand reduction and the development of new supply options continue to manage existing abstraction levels to protect the environment Working with local partners on smarter water catchments initiatives to nurture the water cycle, improve river quality and enhance ecosystems Enhancing biodiversity on our sites through a blend of changing grassland management and the creation of new habitats by 5% during this AMP. In addition, we are implementing the mandatory 10% net gain in biodiversity on projects where it is required under the Environment Act 2021. 	

Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)


4. We are unable to operate, maintain or develop our technology systems or networks to support our operations	
<ul style="list-style-type: none"> Loss/compromise of critical business systems/ data Prolonged information//operational technology outage. 	
Trend 	Explanation of risk trend Overall risk is stable due to Thames preparing our systems for "hybrid" working between home and office. We are also updating of our contact centre and work management systems are being improved to improve customer service. There is also an ongoing shift to cloud services to offset aging technology risk.
Risk impact May result in disruption to our corporate, operational and customer systems and services.	
How we're managing the risk <ul style="list-style-type: none"> Reviewed our technology investment for the next three years – deliberate decision to increase investment and reduce risk by: <ul style="list-style-type: none"> Upgrading critical systems used to manage leakage and test water quality to keep them current Replacing 3,500+ analogue telecoms lines with digital services by 2025 Continuing to upgrade the systems we use to schedule operational work on our assets Replacing out of date applications with modern platforms Continuing to move applications to the cloud to improve resilience Upgrading our networks to keep them in support Upgrading servers and operating systems to keep them current. 	

5. We fail to protect physical assets	
Material loss or damage to key operational sites due to malicious third party action, that impact service to customers and the environment.	
Trend 	Explanation of risk trend Risk is stable. No material increases in vulnerability.
Risk impact May result in contamination of water or loss of containment at reservoir through malicious activity, uncontrolled release of water or wastewater through malicious activity and supply interruptions. Apart from remediation costs associated with reservoir breach, contaminated water or more likely cost of vandalism, theft, and site security there may also be regulatory investigations or penalties and reputational harm.	
How we're managing the risk <ul style="list-style-type: none"> Compliance with Protective Security Guidance (PSG) and Water UK Security Standards (WUKSS) Maintenance of security systems and CCTV including access alarms Security and Emergency Measures Direction (SEMD) programme delivery and SEMD audit programme Site and strategic asset surveys and condition assessments Regular risk assessments of physical security threats and measures Incident response process Management of our Security Services contract 	

Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)


6. We fail to defend against cyber-crime and protect our data	
<ul style="list-style-type: none"> Loss/ compromise of critical business systems/ data Prolonged information/operational technology outage 	
Trend 	<p>Explanation of risk trend</p> <p>Overall across the year we improved controls through our dedicated cyber security programme and our risk remained stable. We continue to monitor the wider geo-political landscape carefully to respond to a deteriorating threat position.</p>
<p>Risk impact</p> <p>May result in loss of systems or data that affect our ability to provide safe drinking water, protect the environment or respond to our customers' needs.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> Improved the Drinking Water Inspectorate (DWI) relationship and usage of the industry wide Cyber Assessment Framework tool to assess our cyber risks Created an Executive-led weekly Cyber Gold Command to oversee cyber risk management, review overall Business Continuity Planning, and to have a Crisis Management team in place "just in case of attack" Continued a dedicated Cyber Security Programme that is further developing the technology that secures our information and controls our operational technology assets Designed and commenced procurement of a new Privileged Access Management platform with heightened password management and rotation Improved control processes to enable role-based access control to reduce the risk of unauthorised access to data and systems Designed new capability to protect and reduce the risk of attack to the operational technology network, enabling the detection of attack, identification of vulnerabilities and remote access Maintained regular updates of our technology with the latest security patches, and active management of system users Continued to strengthen our technology security measures including effective modern firewalls, threat and vulnerability monitoring, identity management and multi-factor authentication Maintained clear policies and procedures with mandatory security awareness training Increased the use of incident alerting tools, and tools to prevent the deliberate and accidental loss of data and maintained physical and electronic site security controls including active alarm monitoring. 	

7. We fail to effectively design, deliver and/or handover, capital projects	
Ineffective design, delivery and/or handover of capital projects.	
Trend 	<p>Explanation of risk trend</p> <p>Risk has increased. The risk exposure is increasing owing to construction inflation (labour, plant, materials) and the affordability of the original cost-benchmark.</p>
<p>Risk impact</p> <p>The consequence of under-performance in the Capital Programme is de-scoped programmes and projects leading to higher environmental and customer risk in the operational business.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> The optimisation of the portfolio of projects through the business planning cycle; The implementation and continuous improvement of our Intelligent Client model, that is bringing greater control over the management of our AMP7 Portfolio, Programmes and Projects; Investing in our people to embed the skills needed to fulfil our short, medium and long-term objectives; Driving efficiency through our organisation and our supply chain using efficiency levers including: <ul style="list-style-type: none"> Asset standards reviews Programme optimisation Collaborative planning and production control Productisation & Standardisation (Product & Solution). 	

Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)

8. We fail to maintain asset integrity and resilience	
Major event caused by aging assets, mains burst, sewer collapse or a Northern Outfall Sewer bridge failure.	
Trend 	Explanation of risk trend Overall risk is stable. We have continued to improve asset information and our understanding of asset health and resilience, with improvements in key measures such as mains repairs and replacement of key high-risk assets. However, we have also experienced and anticipate ongoing increased costs associated with energy which have put additional pressure on our investment plans.
Risk impact Deterioration in the health of our asset base resulting in a reduction in operational performance, an increase in asset integrity failures, injury or fatalities of our employees or members of the public, failure to meet regulatory obligations and significant reputational damage.	
How we're managing the risk <ul style="list-style-type: none"> Implemented an Asset Management System which is certified to ISO 55001:2014 to maximise the value from our assets Maintain an asset register which is used to define targeted maintenance programmes based on asset criticality Asset standards in place and subject to continual improvement to improve compliance Targeted inspections plan in place to enhance and maintain critical assets such as trunk mains, trunk sewers and assets in the rail environment to reduce the likelihood of catastrophic failure Developed and maintained our rising main burst risk model that assimilates information on material, location and historic burst rates and provides key information to the business on the priority locations of rising main rehabilitation/renewal Resilience assessments undertaken for water and in progress for wastewater to identify resilience needs beyond our risk appetite Improving asset information and our understanding of asset health and asset risk to inform investment planning. This includes developing improved visualisation of the data we hold, with plans to develop more forward-looking metrics to identify emerging trends and a broader set of asset health KPIs Developing asset strategies for our key asset cohorts to identify long-term investment needs Full review of our capital governance, allocation, and efficiency processes to ensure a targeted approach to our investment choices based upon immediate and long-term risk profiles to maximise our resilience outcome Incident management structure in place to respond to small to large scale incidents should our assets fail. 	

9. We fail to supply enough wholesome water to meet demand	
<ul style="list-style-type: none"> Prolonged periods of no water due to asset and/or process failure Water quality incident that results in widespread 'Do Not Use' or 'Do Not Drink' notices. 	
Trend 	Explanation of risk trend Overall risk is stable. Despite challenging supply chain and business issues the risk trend is stable, driven by significant business focus within this area.
Risk impact We may impact business, domestic customers and communities due to interruptions to water supply or cause danger to public health due to poor water quality.	
How we're managing the risk <ul style="list-style-type: none"> Thames Water driven risk based Public Health Transformation Programme, addressing key water quality and resilience risks, focusing on customers, people, investment and processes and includes the delivery of agreed Drinking Water Inspectorate improvement programmes. This year we completed our largest ever programme of staff training and upskilling to reduce operational risk and improve resilience of supply to customers Industry leading Conditional Allowances programme to reduce risk at our large water production facilities and high-risk trunk mains and thereby improve the resilience of supply of potable water to customers Leakage reduction programme, including our ambitious plans to insource the repair and maintenance activity of our potable water infrastructure Delivering SMART (Smart Metering and Smart Water) proactive management of our potable water network, using data and insights to drive system-wide performance improvements from source through to our customers taps. These programmes include demand management, customer water efficiency, improving real-time process and network data, proactive programmes to manage pressure across our system to prevent bursts and reduce leakage Accelerating our programme of critical asset maintenance. Including the largest ever number of maintenance activities on our critical London Trunk Main and a major refurbishment of one of our major raw water storage reservoirs – the Queen Elizabeth II reservoir. Our Water Resource Management Plan (WRMP) sets out how we will manage the water supplies in our region to meet current and future needs up to 2100. 	


Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)

10. We fail to collect, treat and recycle wastewater to protect public health and the environment	
Serious and/or long lasting adverse public health or environmental impact resulting from pollution incidents due to asset and/or process failure.	
Trend 	<p>Explanation of risk trend</p> <p>Overall risk has increased. There is growing concern regarding the historic industry practice of adopting combined sewer overflows in order to prevent sewer flooding during rainfall events. Given the introduction of bathing water status to rivers and recent river health reports, there is increasing scrutiny to understand the extent of storm over-flows and accelerate the reduction in their use and subsequent volumes of storm discharges.</p> <p>There is accepted non-compliance with flow to full treatment at sewage treatment works across the sector which has resulted in Ofwat commencing an investigation coupled with a criminal investigation by the Environment Agency.</p> <p>Whilst there has been an overall reduction in the number of pollution incidents over the year, this still re-mains above our target reduction.</p>
<p>Risk impact</p> <p>Premature and prolonged spills from storm overflows can adversely impact river health and amenity value associated with the use of rivers for swimming and water activities by the public. Non-compliance with permit conditions, can lead to criminal and regulatory investigations.</p> <p>Blockages and failures on the waste network can disrupt business and domestic customers due to interruption to drainage services and sewer flooding.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • Delivery of Spills Reduction Plan to better understand performance at our sewerage treatment works (STW), address compliance risk to permit, and invest in resilience and treatment capacity on our sites to reduce need for storm overflows and hit our target of 50% reduction in spill duration overall and 80% reduction in sensitive rivers • Delivery of Pollution Incident Reduction Plan; key initiatives include: <ul style="list-style-type: none"> ◦ Continued roll out of our digital smart waste network deploying over 8,500 monitors into the network in AMP7 to predict and identify blockages before they have any customer or environmental impact. ◦ Enhanced sewer rehabilitation programme ◦ Proactive inspection and removal of sewer interceptors that contribute 20% of all blockages ◦ Improved monitoring at our STWs ◦ Continued lobbying to restrict the sale of plastic based wet wipes • Delivery of landmark sewer enhancements through the Lee Tunnel and Thames Tideway Tunnel to improve river water quality • Asset strategy development for our key asset cohorts to identify medium to long-term investment needs, including the development of our Drainage and Waste Management Plan working with organisations responsible for drainage to identify investment needed to protect homes and businesses from flooding. • Increasing resilience of our waste network to winters and high ground water periods through catchment Groundwater Impacted System Management Plans, and prioritise future resilience investment through the development of wastewater resilience assessments based on good practice in water supply • Critical Asset Inspection Programme covering Northern Outfall Sewer, trunk sewers, critical pumping stations, sewers crossing railways and digesters • Researching emerging contaminants in sludge and developing alternative solutions to sludge recycling to agriculture. 	

Principal risks and uncertainties (continued)



Principal risks and uncertainties (continued)

11. We fail to attract, engage and retain a diverse and inclusive workforce	
Industrial action or staff shortages	
Trend 	<p>Explanation of risk trend</p> <p>Overall risk is stable. External economic, political and societal factors such as rising inflation, challenging recruitment market, increase in business change activity and updated requirements for competence.</p>
<p>Risk impact</p> <p>Without an appropriately skilled, diverse, and engaged workforce and leadership team we may be unable to deliver the transformational change necessary to deliver our AMP7 plan and long-term ambitions.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • Making progress with our skills strategy, addressing current and future requirements • Building strategic partnerships in recruitment to access a diverse range of candidates, with particular focus on care leavers and young persons • Making our recruitment and onboarding processes easy and accessible • Growing our apprenticeship offer to upskill existing colleagues, build leadership capability, and attract new talent by offering quality programmes from level 2 to 6 (degree level) • Developing technically competent colleagues to demonstrate competency to our regulators. We're extending our license to operate framework to more critical technical roles with training, coaching and periodic assessment • Holding regular living our values events to raise everyone's engagement • Strengthening our relationship with Trade Unions, participating in joint workshops to deliver agreed approach to business changes. 	

12. Our activities fail to prevent physical injury or mental harm (to our employees, supply chain partners or members of the public)	
Fatality/serious life changing injury	
Trend 	<p>Explanation of risk trend</p> <p>Overall risk is stable. Process & Asset Safety – No significant process or asset failures. Strong focus on improving understanding of risk profile and control environment in these areas has commenced.</p> <p>Occupational Health, Safety & Wellbeing – Annual increase in lost time incidents, although rate still industry leading. New Situational Awareness programme to address personal hazard perception and attention, contributory causes to many lost time injuries. Reduction in incidents of damage to buried utility services. Rising cases of stress and anxiety disorders linked to new ways of working, post Covid.</p>
<p>Risk impact</p> <p>Fatality/serious life changing injury.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • The strategic Health, Safety and Wellbeing Improvement Programme is aligned with our Turnaround Plan: <ol style="list-style-type: none"> 1. Fix the basics – Detailed risk management review to fully understand our safety risk profile, identify clear priorities, accountabilities and improvement activities aligned to objective risk reduction and assurance. 2. Raise the bar – Implement a Human Factors programme to understand and explain why people do what they do and to shift the focus from compliance with policy and procedures to visible leadership and ability to influence behaviours 3. Shape the future – Set aspirational long term goals to inspire innovation from within Thames Water and through our supply chain partners • The Corporate value of 'Take Care' is supported by a strong health, safety and wellbeing culture • Health and safety management system is externally accredited to ISO 45001 • Integrated mental and physical health interventions are delivered by health and safety advisers, in-house occupational health team and network of trained mental health first aiders • External risk-based audits of critical operational areas drive objective improvement plans • Robust performance and assurance reporting is provided through management and Executive Committee structures • Board Health, Safety and Environment Committee monitors performance and oversees health and safety risks. 	


Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)

13. We are unable to secure sufficient liquidity to meet our funding requirements	
Insolvency or insufficient resources to satisfy Instrument of Appointment obligations.	
Trend 	<p>Explanation of risk trend</p> <p>Overall risk is stable. Geopolitical and macroeconomic challenges are increasing the cost of funding. This is being monitored closely, and despite market volatility, we continue to have access to debt capital markets. Furthermore, we have ready access to significant credit facilities.</p>
<p>Risk impact</p> <p>Deterioration in credit ratings could potentially give rise to increases in associated funding costs and/or reduced access to debt capital markets. This, in turn, may adversely impact our ability to deliver transformational change.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • Treasury strategy covering funding, hedging and cash management in place • We are undertaking a detailed capital structure review with the support of our shareholders • Focus on cashflow management to maintain a strong liquidity position supported by available committed banking facilities • Ongoing focus on credit ratings and financial covenant headroom in budget setting • Investment governance process in place • Regular communication with key stakeholders (e.g., lenders and credit rating agencies) • Our Treasury team is monitoring the capital markets with a focus on de-risking funding plans where possible and being increasingly alert to bank counterparty risk. 	
14. We fail to adapt our cost base for changes in inflation or interest rates	
Breach of our financial covenants and / or material financial losses.	
Trend 	<p>Explanation of risk movement</p> <p>Risk has increased. Recent price increases across key components of our cost base (including power and chemicals) have been unprecedented. Inflationary pressures are expected to continue into FY24, impacting much of our cost base. Rising economic pressures experienced by UK households could pose further risks to cash collection and operating cashflow.</p>
<p>Risk impact</p> <p>If we are unable to adapt our cost base to rising inflation or interest rates, this could result in re-prioritisation of investment and reduced service levels, impacting customer service and operational performance. In addition, our financing arrangements rely on the business generating sufficient operating cashflow. A very material deterioration may cause a breach of covenants resulting in intervention by our financiers.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • Power hedging to provide cost certainty over a large proportion of power costs • Supplier management programme to improve quality, efficiency, innovation and cost • Debt improvement programme focused on optimising cash collection from household customers • Robust performance management processes to analyse and initiate action to improve cost base and cash collection performance • Management focus and action taken on working capital to improve cash positions • Delivery of the Treasury strategy, specifically optimising the liquidity position; funding requirements; interest, inflation and cross currency hedging. 	

Principal risks and uncertainties (continued)


Principal risks and uncertainties (continued)

15. We fail to comply with our own values, behaviours and standards as well as our legal and regulatory obligations	
<ul style="list-style-type: none"> Serious breach of Instrument of Appointment, water industry regulation and/or statutory legislation Unlawful activity/behaviour by Thames Water or its partners. 	
Trend 	Explanation of risk trend Risk has increased. Ofwat and the Environment Agency have opened investigations into the performance of our sewage treatment works due to concerns regarding compliance with the flow conditions. As a result, we are experiencing an upward trend in terms of the level of scrutiny we are placed under by our regulators. There are also risks around delivery of our WINEP schemes.
Risk impact Failure to comply with legal and regulatory obligations could lead to financial penalties, reputational harm and loss of customer and investor confidence. We could be subject to, possible lengthy investigations by regulators, particularly in relation to regulations for the water industry, as well as, for example, environmental, health and safety, competition and data protection legislation with potential resultant fines linked to company turnover.	
How we're managing the risk <ul style="list-style-type: none"> An embedded policy framework to understand and meet legal and regulatory compliance obligations Accountability matrix for individual 'licence' conditions Regular audits of compliance with key regulatory obligations and undertakings Horizon scanning for changes to the legal and regulatory environment The Executive, with oversight from the Board, promotes high ethical standards of behaviour Anti-bribery and corruption governance, monitoring and investigation of dishonest and unethical behaviour. Clear Speak Up reporting and whistle blower lines. These ensure any failure to comply with our values and standards should be identified and resolved accordingly Reporting process and forms completed for all conflicts of interest, inducements, gifts and hospitality ensuring transparency in all probity matters. Health and safety culture, audit and review programme Strengthening of policies and standards, control frameworks and associated three-line assurance model (e.g., Financial Controls Improvement Plan, implementation of Health and Safety Control Framework) Documented processes and controls for key activities Mandatory training programmes. 	

16. We fail to deliver public value	
<ul style="list-style-type: none"> Unable to deliver our strategy Adverse PR24 outcome. 	
Trend 	Explanation of risk trend Overall risk is stable. Although public interest in different aspects of public value has increased (particularly those related to rivers and affordability) and decreased (particularly climate change, post COP26, and leakage) on balance we assess the level of risk as stable. Our pro-active messaging ahead of the rest of the industry, on the unacceptability of discharging untreated sewage has been well-received, as has our commitment to transparency and our intensive programme of stakeholder engagement on this topical issue.
Risk impact Reputational damage and negative stakeholder perception if we fail to deliver what customers value and fail on environmental stewardship. It will undermine our ability to work in partnership. The ultimate consequence is loss of our licence/being re-nationalised (possibly with little or no compensation). More immediately, there would be a risk of negative headlines, customer complaints and community protests, with potential for enforcement action with financial penalties, more investigations, adverse regulatory and public policy outcomes, and an adverse PR24 settlement.	
How we're managing the risk <ul style="list-style-type: none"> Strategy led work to define and operationalise Public Value. Finance led work to create and embed Investment Appraisal Framework, including Public Value Strategy led work to embed Public Value in Key Performance Indicators and Key Risk Indicators, objectives, etc. Regulation led work to embed Public Value in our PR24 submission to Ofwat and in engagement with all regulators Public Affairs and community/stakeholder engagement work to identify emerging issues and understand and address local concerns Customer Challenge Group (CCG) to help us ground our work in customer and community engagement. 	

Principal risks and uncertainties (continued)

Principal risks and uncertainties (continued)

17. We fail to engage, and gain the trust of, customers, communities and stakeholders in our plans	
Renationalisation, loss of our Instrument of Appointment without compensation.	
Trend 	<p>Explanation of risk trend</p> <p>Overall risk is stable. Driven by increased risk from the attention placed on spills and river pollution and our continued operational and performance challenges offset by greater transparency and our Turnaround Plan.</p>
<p>Risk impact</p> <p>We may be unable to secure the necessary engagement, support and investment necessary to deliver our long-term ambitions.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • We are working with a third party to measure and evaluate our reputation and assess key areas of interest and influence for our Stakeholders • Extensive engagement with customers and with stakeholders at national, regional and local levels to understand their needs, expectations and preferences • Implementing our turnaround plan to improve our performance and customer service • Public value programme to support wider community engagement and environmental improvement • Implemented robust 24/7 communication and engagement with customers and stakeholders during incidents • Proactive engagement with impacted customers and stakeholders to support delivery of our AMP7 capital programme • Proactive and continuous engagement with customers and stakeholders on key business plans, 2050 Vision, Water Resources Management plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) • Introduced new structures and processes to support stakeholder engagement across the business to support a more coordinated approach internally • Regular engagement with Government officials and elected representatives on water, environment, and customer service-related issues • Regular dialogue with investors to support them in their investments and reflect their priorities in our plans • Working to ensure all commitments have been properly thought through and are tracked through to completion. 	

18. We fail to protect our business from developments in the regulatory, legislative or political environments	
Catapulted into non-compliant environment with new unfunded obligations	
Trend 	<p>Explanation of risk trend</p> <p>Risk has increased. Ongoing high level of political and regulatory interest in company performance on sewage spills and, linked to that, scrutiny of corporate finance and governance issues including dividend payments and Executive pay. In addition, there is more political and regulatory scrutiny/action as evidenced by Ofwat/Environment Agency investigations and the government consultation on storm overflows.</p>
<p>Risk impact</p> <p>Our operations might be impacted by changes to the regulatory framework or legislation which influence how we are regulated and the statutory requirements we must meet or require significant investment over what we anticipated in our business plan.</p>	
<p>How we're managing the risk</p> <ul style="list-style-type: none"> • Horizon scanning for changes to the legal and regulatory environment • Tracking changes in regulatory policy and obligations • Tracking commitments made and delivery against commitments • Building compliance culture and compliance risk assessment across Thames. • Conducting targeted risk based regulatory compliance work • Monitoring developments in Whitehall, Westminster and City Hall • Building intelligence on drivers for change and changes in the pipeline • Influencing regulatory policy agenda and public policy • Building relationships with regulators (Ofwat, Drinking Water Inspectorate, Environment Agency) and political stakeholders, including demonstrable delivery against Turnaround Plan • Active and ongoing engagement and consultation with regulators, politicians and regional and local stakeholders on a broad range of issues, particularly those of high concern such as resilience, river water quality, and a review of London flooding • Facilitating discussion and collaborative work on matters of policy • Working in partnership with other organisations such as Water UK, other water companies and industry bodies to inform the public policy debate around the water sector. 	

Financial review

Key financial performance indicators

	2022			2021		
	Underlying £m	BTL £m	Total £m	Underlying £m	BTL £m	Total £m
Revenue (£m)	2,092.1	84.9	2,177.0	2,033.0	73.8	2,106.8
Operating expenses (£m)	(1,867.4)	(0.1)	(1,867.5)	(1,764.1)	(0.2)	(1,764.3)
Operating profit (£m)	321.5	84.8	406.3	391.1	73.6	464.7
Net finance expense (£m)	(1,151.3)	-	(1,151.3)	(890.3)	-	(890.3)
Net losses on financial instruments (£m)	(895.5)	-	(895.5)	(524.9)	-	(524.9)
Loss before tax (£m)	(1,725.3)	84.8	(1,640.5)	(1,024.1)	73.6	(950.5)
Loss after tax (£m)	(1,718.0)	68.7	(1,649.3)	(831.3)	59.6	(771.7)
Capital expenditure (£m)	1,344.0	-	1,344.0	1,105.0	-	1,105.0
Statutory net debt (£m)	(21,703.5)	-	(21,703.5)	(20,593.9)	-	(20,593.9)
Post maintenance interest cover ratio (PMICR) *	1.2	n/a	n/a	1.6	n/a	n/a
Gearing (%) **	88.0	n/a	n/a	91.0	n/a	n/a
Credit rating ***	n/a	n/a	Baa2 stable	n/a	n/a	Baa2 stable

* As defined on page 57.

** Ratio of covenant net debt to Regulatory Capital Value ("RCV"), defined on page 57.

*** Representing the Corporate Family Rating ("CFR") assigned by Moody's for the operating subsidiary, TWUL. In May 2022, Moody's completed a periodic review of KWF guaranteed debt which was unchanged at B1, with stable outlook. In March 2022, Fitch affirmed KWF's Long-Term Issuer Default Rating at B+ with negative outlook.

Overall performance

Revenue

Our revenue primarily relates to the essential water and wastewater services we provide to our customers. Our economic regulator, Ofwat, determines the amounts we charge in our bills every five years through a price review process, which is driven by the costs we expect to incur to invest in and operate our business over that five-year regulatory period. Our current regulatory period covers 1 April 2020 to 31 March 2025 ("AMP7").

Our total revenue for the year ended 31 March 2022 increased by £70 million to £2,177 million (2021: £2,107 million). The increase is driven by a higher allowed revenue set by our regulator Ofwat, a recovery of revenue in the non-household market as Covid-19 restrictions ease and continued resilience in the household revenue. Household water usage has remained high despite an easing of UK Government Covid-19 restrictions, with many of our customers continuing to work from home.

BTL revenue increased by £11 million to £85 million (2021: £74 million) due to the phasing of construction works.

Bad debt

Bad debt arises predominantly from those who choose not to pay their bill, despite being financially able to, as opposed to those who cannot pay. For the latter, we offer a range of support for people in financially vulnerable circumstances.

During the year ended 31 March 2022, we have seen a reduction in our overall bad debt cost of £20 million to £67 million (2021: £87 million). The reduction, including the additional management provision, is primarily due to the impact of the initiatives implemented in prior years to reduce bad debt, offset by the cost of living increase challenging customers' ability to pay their bills. The current year charge is split between bad debt relating to current year bills (amounts that are not expected to be collected when invoiced) of £57 million (2021: £50 million), which is shown as a deduction in revenue, and bad debt relating to bills from prior years of £10 million (2021: £37 million), which is shown as a cost within operating expenses. Our total bad debt charge equates to 3.0% (2021: 4.1%) of total gross revenue. We are working hard to reduce bad debt and have implemented several initiatives to reduce the overall charge as a percentage of gross revenue.

Capital expenditure

During the year, we invested £1,344 million (2021: £1,105 million) in our assets, of which £115 million related to capitalised borrowing costs. The substantial increase year on year is driven through investing heavily in our infrastructure to help mitigate the challenge of ensuring resilience in our network from the impacts of climate change and population growth. Key projects within capital expenditure include:

- £234 million investment through our major Capital Delivery vehicle, which includes £32 million on Water distribution mains replacement and rehabilitation in London and the Thames Valley; £25 million relating to the installation of new Water Trunk mains including along the Faringdon to Blunsdon route; and £19 million on tunnels & aqueducts, namely inspection and refurbishment across London's raw water transfer tunnels and the Thames Water ring main;
- £201 million through our Infrastructure Alliance on our Water Network to reduce leakage and improve our trunk main network;
- £73 million on Major Projects, including £38 million on upgrading our major sewage treatment works at Beckton;
- £33 million on connecting our network to the Thames Tideway Tunnel including £20 million on Beckton Inlet Works;
- £65 million on our Metering Programme.

Overall performance (continued)

Financing our investment

As the Group are investing heavily in the business, we continue to focus on the importance of ongoing investor engagement to support our strategy of diversifying our sources of funding and maintaining a balanced debt maturity profile. Our strategy of adopting a prudent approach to liquidity has continued given the ongoing uncertainty and the cost of living crisis has introduced. Our statutory net debt (as defined in the accounting policies section) has increased by £1,110 million to £21,704 million (2021: £20,594 million). This has been accompanied by an increase in the Regulatory Capital Value ("RCV") of £1,616 million to £16,641 million (2021: £15,025 million). Overall gearing (on a covenant basis) was 88% (2021: 91%), below the permitted maximum of 95.0%. Additionally, our Post Maintenance Interest Cover Ratio (PMICR) in the current year is 1.2x (2021: 1.6x) and is above the permitted minimum of 1.05x.

In anticipation of our 2020 to 2025 investment programme, during the year ended 31 March 2019 TWUL Group increased the size of its Revolving Credit Facility (RCF) from £950 million to around £1.65 billion, and in November 2020 extended the maturity of £1.44 billion of that facility by one year from 2024 to 2025. Throughout the year, total new debt issuance and facilities of £1,342 million equivalent were completed in TWUL Group, as follows:

- in June 2021 TWUL entered into a £200 million Class B loan agreement due 2026 which was fully drawn in September 2021;
- in September 2021 TWUL entered into a £100 million Class B loan agreement due 2028 which remains undrawn;
- in December 2021 TWUL entered into a £75 million Class B loan agreement due 2025 which was fully drawn in March 2022;
- in January 2022 TWUL issued £967 million equivalent of public debt through a €575 million bond due 2028 and a €575 million bond due 2032;

Since 31 March 2022, TWUL has further strengthened its financing position by entering into a £150 million Class B loan facility due April 2029, a £50 million Class B loan facility due August 2025 and a £100 million Class A loan facility due May 2029, all of which are currently undrawn. Since 31 March 2022, £350 million of the Class A RCF has been drawn and the following debt has been repaid:

- £371 million Class B RCF
- £63 million Class A loan due March 2027
- £12 million of £63 million Class A loan due March 2029
- £50 million Class A loan due May 2022

The associated net finance expense has increased by £261 million to £1,151 million (2021: £890 million), mainly reflecting a £179 million higher RPI accretion on borrowings, £63 million decrease in net interest income on swaps mainly due to the impact of the restructured interest rate profile of three index-linked swaps completed in prior years, £63 million increase in interest in relation to intercompany borrowings offset by £46 million increase in capitalised borrowing costs. Under the IFRS accounting framework we capitalise the interest costs related to major capital projects with the finance expense in the income statement being shown net of these capitalised costs. Capitalised interest costs were £115 million this year (2021: £70 million).

Operating expenses

Total operating expenses have increased by £103 million (2021: £72 million increase) in total.

The movement in operating expenses is primarily driven by:

- a £35 million increase in our employment costs, as we invested to improve our service to customers and provide pay rises for non-manager grades;
- a £44 million increase in our power costs driven by extreme power price inflation that has impacted industries globally as well as our customers and
- a £24 million decrease in other operating expense, relating to lower business rates costs as a result of receiving a rates rebate and a decrease in our charge for bad debts for bills relating to prior year, offset by an additional charge in relation to environmental and legal provisions.

Financial instruments

Our borrowings, revenue and total expenditure ("totex") (as contained in the accounting policies) are exposed to fluctuations in external market variables such as changes in interest rates, inflation and foreign exchange rates. We manage these exposures by entering into derivative contracts in order to hedge against future changes in these external rates.

We have approximately £10.7 billion of derivative financial instruments (face value). A total loss on financial instruments of £896 million was recognised in the income statement during the year (2021: loss of £525 million). This is driven by £822 million net fair value loss on swaps, a £31 million loss on cash flow hedge transferred from reserves and £42 million net exchange losses on foreign currency borrowing. Note 7 to the financial statements provides detail of the amounts charged to the income statement in relation to financial instruments.

Overall performance (continued)

Credit rating

We retain investment grade credit ratings for TWUL Group, that allow us to access efficiently priced debt to fund our investment programme, whilst keeping bills affordable for our customers. In May 2022, Moody's completed a periodic review of TWUL Group ratings, with the Corporate Family Rating ("CFR") for TWUL continuing as Baa2 with a stable outlook (2021: Baa2 with stable outlook) and our securitisation group companies' senior secured (Class A) debt rating continuing as Baa1 with stable outlook (2021: Baa1 with stable outlook) and subordinated (Class B) debt rating continuing as Ba1 with stable outlook (2021: Ba1 with stable outlook).

In March 2022, Fitch affirmed the Company's senior secured debt rating at B+ (2021: B+) and Long-Term Issuer Default Rating at B+ with negative outlook (2021: B+ with negative outlook). In May 2022 Moody's completed a periodic review of the rating of the Company's finance subsidiary, Thames Water (Kemble) Finance plc's, senior secured debt which was unchanged at B1 with stable outlook (2021: B1 with stable outlook).

Dividends

The Company's dividend policy is to pay a progressive dividend commensurate with the long-term returns and performance of the business, after considering the business's current and expected regulatory and financial performance, regulatory restrictions, management of economic risks and debt covenants. Directors, in assessing the dividend to be paid, are required to ensure that:

- Payment of a proposed dividend should not impair short term liquidity or compliance with our covenants
- Payment of a proposed dividend should not impair the longer term ability to finance the company's business
- Assessment of the impact that payment of the dividend may have on all stakeholders including employees, pension members and customers
- Our financial performance, that underpins the opportunity to pay the dividend, is as a result of operational performance that meets the level required of a supplier of essential services
- If a net dividend is declared above Ofwat's 4% dividend yield guidance, applied to Ofwat's notional company, the Thames Water Utilities Board will consider whether the additional returns result from performance (including progress towards de-gearing) that has benefited customers and may therefore be reasonably applied to finance a dividend.

No dividends or interest on shareholder debt was paid to external shareholders in 2021/22.

Pensions

We operate four pension schemes for our employees – three defined benefit schemes and one defined contribution scheme. During 2021/22, we contributed £27 million (2021: £15 million) to the defined contribution scheme.

Our defined benefit scheme accounting valuation has been updated to 31 March 2022 on our behalf by independent consulting actuaries, Hymans Robertson LLP. The total net retirement benefit obligation for the three schemes as at 31 March 2022 was £ 253 million (2021: net retirement benefit obligation of £227 million). This comprises a £257 million net deficit (2021: £277 million net deficit) in the Thames Water Pension Scheme (TWPS), which was closed to accrual during the year, a further net deficit of £7 million (2021: £8 million net deficit) in the SUURBS pension scheme, and a surplus of £12 million (2021: surplus of £58 million) for the Thames Water Mirror Image Pension Scheme (TWMIPS). We have been taking measures to reduce the overall deficit, the Group made a pension deficit repair payment of £70 million on 30 March 2021 covering the financial periods from 2021/22 to 2024/25. The increase in the deficit is mostly driven by a change in actuarial assumptions primarily driven by external market factors, such as an increase in the discount rate.

Capital, financial and actuarial risk management policies and objectives

The Group's operations expose it to a variety of capital, financial and actuarial risks.

Capital risk management

Capital risk primarily relates to whether the Group is adequately capitalised and financially solvent. The key objectives of the funding strategy are to maintain customer bills at a level which is both affordable and sustainable, retain the Group's investment grade credit rating and provide liquidity sufficient to fund ongoing obligations.

The Board reviews the Group's exposure to these risks and actively oversees the treasury activities, reviewing the treasury policy and approving the treasury strategy and funding plan.

The capital structure of the Group consists of net debt and equity as disclosed in note 20. The Group's net debt is comprised of cash and cash equivalents, short-term investments, bank loans, lease liabilities and shareholder's loans.

The Group's funding policy is to maintain a broad portfolio of debt (diversified by source and maturity in order to protect the Group against risks arising from adverse movements in interest rates and currency exposure) and to maintain sufficient liquidity to fund the operations of the business for a minimum of a 15-month forward period on an on-going basis. Derivative financial instruments are used, where appropriate, to manage interest rate risk, inflation risk and foreign exchange risk. No open or speculative positions are taken.

Capital, financial and actuarial risk management policies and objectives (continued)

Financial risk management

(i) Market risk

Market risk is the risk that changes in market variables, such as inflation, foreign currency rates and interest rates, will affect the Group's income or the value of its holdings of financial instruments. Financial instruments entered into by the Group include RPI linked bonds, loans and swaps. These instruments are exposed to movements in the UK RPI index. The principal operating company of the Group, TWUL, is a regulated water company with RPI linked revenues. Therefore the Group's index-linked borrowings form a partial economic hedge as the assets and liabilities partially offset. The Group also uses derivatives to manage inflation risk on non-index-linked borrowings.

The Group's foreign currency risk exposure results from debt raised in currencies other than Sterling. The Group uses cross currency swaps to hedge the foreign currency exposure of debt issued in a foreign currency. All hedges are undertaken for commercial reasons with the objective of minimising the impact of exchange rate fluctuations. The Group has no material unhedged monetary assets and liabilities denominated in a currency different from the local currency of the Group. Further disclosures regarding financial instruments can be found in note 20.

Interest rate risk arises on interest-bearing financial instruments. Fixed rate borrowings are exposed to a risk of change in their fair value due to changes in interest rates. Floating rate borrowings are exposed to a risk of change in interest cash flows due to changes in interest rates. The Group uses interest rate swaps which economically hedge future cash flows to protect against interest rate movements.

(ii) Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's trade receivables, short-term investments and cash flows receivable from counterparties to the derivative financial instruments.

TWUL has a statutory obligation to provide water and wastewater services to customers within its region. Due to the large area served by TWUL and the significant number of household and business customers within this area, there is considered to be no concentration of trade receivables credit risk, however, TWUL's credit control policies and procedures are in place to minimise the risk of bad debt arising from its trade receivables. Amounts provided against trade receivables and movements in the provision in the year are disclosed in note 16.

(iii) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group manages long-term liquidity by maintaining continuity of funding through access to different market and debt instruments, raising funds in the capital markets and ensuring that manageable debt maturity profiles are maintained. The Group also maintains a level of committed liquidity facilities provided by a range of financial institutions. Details of the Group's borrowings and other financial instruments are disclosed in note 19 and 20, respectively.

Actuarial risks

The defined benefit pension schemes are exposed to actuarial risks including investment risk, inflation risk and longevity risk. For further details of these risks, please refer to note 24.

The trustees continue to control the level of investment risk within the schemes by reducing the schemes' exposures to higher risk assets and increasing the level of protection against adverse movements in interest rates and inflation. The trustees also review the risk exposures taking into consideration the longer term objectives of the respective schemes.

Viability statement

The Directors have assessed the longer-term viability of the Group over a ten year period to 31 March 2032. Due to the prolonged look-forward period, the level of certainty of the assumptions used reduces the further into the future we look. The high degree of confidence for the first few years of AMP7, is followed by moderate confidence in the remaining years of AMP7 and a lower level of confidence for AMP8 and AMP9. In spite of the reduced confidence levels in the later years of the look forward period, the Directors continue to consider the ten year period to be appropriate given the long term nature of the business, and the necessity to adopt a sustainable approach.

The Directors have considered the current position of the Group, its ability to effectively and efficiently manage its finances, the current regulatory regime, its continued access to the debt markets, and its ability to maintain a strong investment grade credit rating, whilst having regard to the principal risks and uncertainties as described on pages 5 to 14.

The performance of the Group is mainly dependent on the appointed activities of TWUL which is responsible for the supply of water and wastewater services to customers in London, the Thames Valley and surrounding area. As such, this assessment takes into account the long-term viability of TWUL where the Directors of TWUL have a reasonable expectation that TWUL will be able to operate within its financial covenants and maintain sufficient liquidity facilities to meet its funding needs over the same ten year assessment period.

Viability statement (continued)

Key assumptions underpinning the assessment include the following:

- The aggregate impact of adverse events and conditions, which are not considered in the scenarios modelled, would not exceed the additional mitigations available to management
- The business is able to continue to access debt finance and capital markets
- The water sector is not renationalised
- The Group receives £1.5 billion of equity to, amongst other things, accelerate compliance spending, invest in improving operational performance and increase financial resilience. This assumption is made on the following basis:
 - To support Thames Water in the delivery of its business plan, its shareholders have provided an Equity Commitment Letter where the shareholders have agreed to contribute, or cause to be contributed, an aggregate of £500 million in equity, available to be drawn in full by TWUL in March 2023. Given the initial equity commitment has been approved by shareholders' investment committees, is not subject to any performance-related conditions and can be drawn in March 2023, the Board believes it is reasonable to incorporate £500 million of equity funding in its assessment.
 - Shareholders have further evidenced their support for TWUL and its business plan through an Equity Support Letter where the shareholders have committed to hold investment committee meetings, as a path to obtaining approval for funding their pro rata share of conditional commitments in respect of the further £1 billion of additional equity which is assumed in the TWUL's business plan. Whilst this is not a legal commitment to fund, is subject to conditions and is dependent on governance arrangements between shareholders, given that TWUL and its shareholders are currently engaged in a collaborative process to agree and facilitate such equity commitments, the Board believes it is reasonable to incorporate this additional £1 billion of equity funding in its assessment.
 - Thames Water will carefully monitor progress towards achieving funding under the Equity Support Letter. The Board further notes that in the scenario where sufficient equity commitments and/or funding were not forthcoming, TWUL, at that point, could revise its business plan to fit with then available funding, and adjust total expenditure down accordingly. Implementing a revised business plan would deliver less for customers, communities and the environment.

As part of the Group's financial resilience assessment, management has designed a number of 'stress tests' which subject the Group's existing model, that underlies the Group's planning processes, to a number of severe but plausible scenarios and tests its sensitivity to these. The stress tests consider factors, both individually and in combination. These include:

- Fluctuations in interest rates, which could affect the cost of financing the business;
- Fluctuations in inflation rates, which could affect the cost of investment and day-to-day operations, in addition to impacting amounts we bill our customers;
- Increase in operating and capital expenditure, which would increase costs and reduce cash flows;
- Operational underperformance and the crystallisation of certain regulatory risk events leading to regulatory and legal penalties / fines; and
- Inability to secure new finance and/or delays in raising finance, reducing the cash available to deliver our investment programme.

The assessment showed, in the absence of any mitigating actions, that there are severe but plausible downsides which indicated the need to undertake mitigating actions to avoid non-compliance of financial covenants. It should be recognised that such pressure on the Group's viability is based on hypothetical sensitivities where the probability of these scenarios occurring is uncertain. The analysis showed pressures crystallising at a point in time well into the assessment period, thereby providing sufficient time to implement any mitigating actions if so required. As part of its risk management, the Directors regularly monitor compliance of financial covenants, so as to ensure any issues are appropriately addressed to avoid or reduce the impact of occurrence of the underlying risk.

The Directors believe there are a number of options available, these include but are not limited to the following:

- Modifying or temporarily waiving existing financial covenants and debt amortisations;
- Improving liquidity by increasing the size of its existing £110 million bank facility. This would extend the period over which the Company is able to meet the interest payments of its external debt in the event that there are no distributions from TWUL or when the Company exceeds certain financial covenants. Currently the facility is expected to cover more than 18 months of interest payments; and
- Raising additional capital in the form of deeply subordinated instruments and / or equity from shareholders.

The viability of the Group is heavily influenced by the Company's ability to service external (non-shareholder) debt. Noticeably, these costs have been met by distributions from TWUL. In circumstances where distributions were not made available by TWUL, the Company, as mentioned above, has access to a £110 million bank facility which is sufficient to cover more than 18 months of interest payments. In the event where the absence period of such distributions exceeded that provided by the bank facility, the Company would be reliant on additional support from its shareholders to meet its obligations. The Directors of the Company have discussed this matter with the shareholders, whom they represent, and are confident that support would be available if required.

Taking account of the range of scenarios, the Directors consider that the Group has sufficient mitigating actions available to address particular circumstances and events, should they arise. 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 period of assessment. This conclusion has been made assuming capital markets continue to operate under normal market conditions and that no renationalisation of the water sector takes place over the assessment period.

s172 reporting

The Directors of the Company must act in accordance with the duties contained in s172(1) of the Companies Act 2006 as follows:

"A Director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to:

- (a) the likely consequences of any decision in the long term;
- (b) the interests of the Company's employees;
- (c) the need to foster the Company's business relationships with suppliers, customers and others;
- (d) the impact of the Company's operations on the community and the environment;
- (e) the desirability of the company maintaining a reputation for high standards of business conduct; and
- (f) the need to act fairly as between members of the Company."

On appointment, as part of their induction to becoming a Director, each Director is briefed on their duties and the availability of professional advice from either the Company Secretary or, if they consider it necessary, from an independent adviser. The Directors of the Company have access to the resources provided to the Directors of the Group's main trading company, Thames Water Utilities Limited.

During the year, the Company has continued to act as the holding company of the Kemble Water Finance Limited group. Day-to-day running of the Company is managed by the Company's management team, consisting of employees from the Group's main trading company, Thames Water Utilities Limited.

On 29 June 2022, the Thames Water Utilities Limited Board approved an updated business plan which forecasts £11.5 billion (2017/18 real terms) of total expenditure over the current 5 year regulatory period. To support Thames Water Utilities Limited in the delivery of its business plan, shareholders have provided an Equity Commitment Letter where they have agreed to contribute, or cause to be contributed, an aggregate of £500 million in equity, available to be drawn in full by the Group in March 2023, alongside an Equity Support Letter which sets out further Shareholder support. The equity commitment of £500 million has been approved by shareholders' investment committees, is not subject to any performance-related conditions and can be drawn in March 2023. The Directors of Kemble Water Holdings Limited approved the Equity Commitment Letter and Equity Support Letter on 29 June 2022.

During the year, the Board of Directors have approved various corporate policies and the approval of the Company's annual report and financial statements. The financial statements on pages 36 to 43 were approved by the Board of Directors on 05 July 2022 and signed on its behalf by Perry Noble. The Company had no employees during the year, or as at the date of this report, nor did it have any external customers or trading arrangements with suppliers

Stakeholder management

The Company's stakeholders are considered to be external debt investors, shareholders and other companies within the Kemble Water Holdings Limited Group. The Company places considerable importance on communication with investors and through a Group-wide approach, regularly engages with them on a wide range of topics. The Kemble Water Holdings Group's Head of Corporate Finance is responsible for facilitating communication with investors and analysts and maintains an active investor relations programme. Wider stakeholder engagement occurs regularly throughout the year, both formally and informally.

Community and Environment

The Board supports the Group-wide commitment to seeking to continually improve the delivery of water and wastewater services in the most sustainable way, which means complying with regulation, delivering public value and leaving the environment in a better state than we found it at the end of each regulatory period.

The Board of Directors of the Company 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 Companies Act 2006. The Board of Directors manage the Group and further details of how they have carried out their duties is disclosed in the financial statements of the ultimate controlling party Kemble Water Holdings Limited. The Group's annual report is available from the address shown in note 30.

Approved by the Board of Directors on 5 July 2022 and signed on its behalf by:

P Noble
Director

Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8D

Directors' report

The Directors present their annual report and the audited financial statements of Kemble Water Finance Limited (the "Company") and the audited consolidated financial statements of its Group ("the Group") for the year ended 31 March 2022. These are the Group and Company's financial statements as required to be delivered to the Registrar of Companies. This Directors' report includes certain disclosures required under the Companies Act 2006.

The Directors consider that the annual report and audited financial statements, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess both the Group's and Company's position and performance, business model and strategy.

The Directors have carried out a robust assessment of the principal risks and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity, and details of these risks and their management or mitigation can be found on pages 5 to 14.

The registered number of the Company is 05819317 (England and Wales).

Principal activity

The Group's principal activity is the appointed supply of water and wastewater services to customers in London, the Thames Valley and surrounding area, delivered through its wholly owned subsidiary Thames Water Utilities Limited ("TWUL" or "Thames Water") in accordance with TWUL's licence of appointment.

The Company's principal activity is that of a holding company.

Details of the associated and subsidiary undertakings of the Group at 31 March 2022 has been provided in the notes to these financial statements.

Future outlook

The future outlook of the Group is discussed in the business strategy section of the Strategic Report.

Directors

The Directors who held office during the year ended 31 March 2022 and to the date of this report were:

M McNicholas	
S Deeley	
J Divoky	
G Lambert	
A Hall	
P Noble	
F Sheng	
M Bloch-Hansen	
C Pham	
M Wang	
G Tucker	
D Wilkins	(appointed 1 September 2021)
Y Deng	(appointed 18 February 2022)
S Lowndes	(appointed 29 April 2022)
P McCosker	(resigned 30 May 2021)
H De Run	(resigned 1 September 2021)
C Schmidt	(resigned 18 February 2022)
G Pestrak	(resigned 10 April 2022)
S Obozian	(resigned 29 April 2022)

During the year under review, none of the Directors had significant contracts with the Company or any other body corporate other than their contracts of service (2021: none). Directors are allowed to appoint an alternative Director to represent them if they are unable to attend a meeting. The following Directors have formally appointed alternate Directors to represent them when they are unavailable:

Director	Alternate Director
C Pham	J Divoky
P Noble	D Wilkins
A Hall	S Obozian
M Bloch-Hansen	S Obozian
M McNicholas	S Obozian
G Tucker	Y Deng

Directors' indemnities

Subject to the conditions set out in Section 234 of the Companies Act 2006 and subject to shareholder approval the Group has made qualifying third party indemnity provisions for the benefit of its Directors and for the benefit of other persons who are directors of associated companies of the Group and these remain in force at the date of this report.

Share capital

As at 5 July 2022, the Company's issued share capital was 1,000,001 ordinary shares of £1 each amounting to £1,000,001. There were no movements in the Company's share capital during the year.

Operations outside the United Kingdom

There are no active operations conducted outside the United Kingdom.

Going concern

The Directors have assessed KWF's ability to continue as a going concern, recognising it is a holding company with no material, direct business operations and is therefore mainly dependent on Thames Water Utilities Limited Group ("TWUL Group") which holds the regulated entity Thames Water Utilities Limited ("TWUL") to generate the funds necessary for Kemble Water Finance ("KWF") and Thames Water (Kemble) Finance ("TW(K)F") to meet their respective financial obligations.

Given the dependency on TWUL Group, the Directors have considered the going concern assessment made by the TWUL Group directors as well as the actions taken by TWUL Group post the balance sheet date of 31 March 2022. The section below, "Summary of TWUL Group going concern assessment" outlines this assessment where the TWUL Group Board has concluded it appropriate to prepare the financial statements for TWUL Group on a going concern basis. Further details of this assessment and the post balance sheet events are contained within the TWUL annual report for 2021/22, copies of which may be obtained from the Company Secretary's Office at Thames Water Group, Clearwater Court, Vastern Road, Reading, Berkshire, RG1 8DB.

Summary of TWUL Group going concern assessment

In assessing the appropriateness of the going concern basis, the Directors have considered the following factors.

On 29 June 2022, the Board approved an updated business plan which forecasts £11.5 billion (2017/18 real terms) of total expenditure over the current 5 year regulatory period. To support Thames Water in the delivery of its business plan, shareholders have provided an Equity Commitment Letter where they have agreed to contribute, or cause to be contributed, an aggregate of £500 million in equity, available to be drawn in full by the Group in March 2023, alongside an Equity Support Letter which sets out further Shareholder support. Given the equity commitment of £500 million has been approved by shareholders' investment committees, is not subject to any performance-related conditions and can be drawn in March 2023, the Directors believe it reasonable that the £500 million of equity support can be taken into account for the going concern assessment.

The Group's liquidity position and cashflow projections are closely monitored and updated regularly. Mitigating measures are also continually reviewed and actioned where appropriate. The Group has significant liquidity headroom based on financial resources in the form of cash and committed bank facilities. As of 31 March 2022, such liquidity consisted of £426 million of cash and cash equivalents, access to £1.80 billion of revolving credit facilities of which £1.43 billion was undrawn, £100 million undrawn Class B facility and £550 million of undrawn liquidity facilities (the latter of which can only be used in limited circumstances). Furthermore during the pandemic, the Group has continued to efficiently access capital markets. As per the terms of the Whole Business Securitisation, the Group is subject to financial covenants, assessed based on interest cover and gearing ratios. With significant headroom being present under the gearing ratios, the interest cover ratios are a more limiting factor and are mainly affected by operational cashflows.

Given the economic uncertainty associated with various macro factors such as Covid-19, supply chain constraints, cost of living concerns and Brexit, a severe but plausible downside case has been considered where the ability of household customers to pay their bills has been adversely affected. This would result in lower collection rates, higher bad debt charges and lower billable volumes in the non-household sector due to reduced consumption. Furthermore, the downside case assumes higher operational costs associated with various efficiency programmes not being delivered, higher power and chemical prices and adverse weather. The impact on operational cashflows is reduced by mitigants involving active working capital management and the release of contingencies embedded with the Business Plan which have also been taken into account. Under the various scenarios, the business remains compliant with the relevant financial covenants and forecasts sufficient liquidity headroom for a period of at least 12 months from the date of signing of the financial statements.

The Directors have also considered the consequences of a temporary Trigger Event, a feature of the Group's Whole Business Securitisation ("WBS") structure. Consequences include, but are not limited to, a cash lockup and a prohibition from incurring additional debt other than utilisations from the existing bank facilities. The Trigger Event acts as an early warning sign that is structured to provide additional creditor protections. It is designed to maintain the Group's creditworthiness as such, it does not affect the Group's continued access to its significant existing bank facilities nor would it disrupt the Group's ability to trade. The cash lockup preserves the value of the Group which is in the interest of creditors and customers. Whilst prohibited from accessing new funding, the Group has significant bank facilities which the Directors believe are sufficient to fund its programme and meet its obligations for the duration of a temporary Trigger Event over the assessment period.

Going concern (continued)

Based on the above, the Board is satisfied that the Group has adequate resources, for a period of at least 12 months from the date of approval of the financial statements, to continue operations and discharge its obligations as they fall due. For this reason, the Board considers it appropriate to adopt the going concern basis in preparing the financial statements.

The conclusion from the TWUL Group Board helps to underpin the Directors' belief that the Company has the ability to meet its financial obligations over the assessment period.

The Directors have assessed the Company's liquidity position and ability to comply with its financial covenants which differ from that of TWUL Group. The financial covenants for KWF take into account the effects of the aggregate net debt outstanding as well as the operational cashflows and profits from KWF and its subsidiaries a consolidated basis. In addition to the cash balances available, KWF also has in place a committed undrawn working capital facility which can fund at least 18 months of interest payments on the external debt held by KWF and its special purpose financing subsidiary TW(K)F. The Directors have considered projected cashflows and forecast compliance with the financial covenants during the assessment period.

The Directors have also considered the consequences of a temporary dividend lockup and / or Trigger Event at TWUL Group. Under such circumstances, TWUL Group would be prohibited from paying out distributions for the duration of the dividend lockup and / or Trigger Event. Such distributions would typically be used to service the interest payments on the external debt held by KWF and TW(K)F. The Directors believe that the sources of liquidity mentioned above are sufficient to allow KWF and TW(K)F to service the external debt interest for the duration of the cash lockup at TWUL Group.

Taking into consideration the above factors, the Board is satisfied that the Company has adequate resources for a period of at least 12 months from the date of approval of the condensed financial statements to continue operations and discharge the Company's obligations as they fall due. For this reason, the Board considers it is appropriate to adopt the going concern basis in preparing the financial statements.

Corporate Governance

The Kemble Water Holdings Board is responsible for the long-term success of the Kemble Water Finance Limited Group by providing leadership and strategic direction on the Group's culture, values and purpose. It provides governance oversight and ensures effective management of risk. It balances the interests of our shareholders with those of our wide range of other stakeholders including customers, employees, and suppliers and the impact on local communities and the environment. The Board also serves as an Audit Committee for all entities with listed private placements that are not overseen by the TWUL Audit Risk and Reporting Committee. This includes Kemble Water Finance Limited. The Board is made up of Non-Executive Directors (NEDs), who are nominated and appointed by the Group's external shareholders, which is why they are not classified as independent. They provide strong experience of financial asset management and value creation, and constructively challenge and monitor the performance and delivery of the Group's strategy, as well as that of the TWUL Executive Board. The Kemble Board is not deemed to require a committee for Director Remuneration, Nomination, Regulatory Strategy, Customer Service, or the Health, Safety and Environment, as all such matters are closely monitored by committees reporting into the TWUL Board.

The Board's system of risk management and internal control aims to ensure that every effort is made to manage risk appropriately, rather than eliminate risk completely, and can only provide reasonable, rather than complete, assurance against material impact. Our management of risk supports this through a number of key company level internal controls and responses:

- Business planning, budgeting and forecasting. These activities support resilient operations and sustainable and robust finances. The annual budgeting exercise includes a detailed budget for the year and a view for remainder of the asset management plan ("AMP").
- Performance reporting – the Board and shareholders receive monthly management reports, including an overview of key performance metrics.
- System of delegated authority – delegated levels of decision making authority are reviewed and approved by the Board;
- Insurance – insurance programme and insurance team in place. The Board review and approve the strategic approach being taken to level and type of cover;
- Company policies, standards, guidelines and procedures – relevant governance documentation is reviewed regularly and is intended to manage our inherent risk;
- Code of conduct and Whistleblower hotline – code of conduct and confidential whistleblowing processes are in place to be investigated by a dedicated team.

Our Enterprise Risk Management and Internal Audit teams also provide reporting and assurance over our management of key business risks.

Financial risk management

During the period the Company had access to the Chief Executive Officer and the Executive Team of TWUL, who also manage the wider Kemble Water Holdings Limited group ("KWH Group") on a day-to-day basis on behalf of the Directors of individual group companies. The Board receives regular reports from all areas of the business. This enables prompt identification of financial and other risks so that appropriate actions can be taken in the relevant group companies.

The Group's operations expose it to a variety of financial risks and information on the use of financial instruments by the Group to manage these risks is disclosed in the strategic report.

Political donations

No political donations were made by the Group or Company during the current or preceding year.

Charitable donations

Charitable donations of £3 million were made by the Group during the year (2021: £4 million).

Intellectual property

The Company protects intellectual property of material concern to the business as appropriate, including the filing of patents where necessary.

Research and development

The Group's research and development programme consists of a portfolio of projects designed to address technical needs across the range of water cycle activities, delivering innovative technical solutions aligned with business needs to address challenges and also provide specialist technical support to the business.

The development and application of new techniques and technology is an important part of the Group's activities. The Group is a member of UK Water Industry Research ("UKWIR") and participates and benefits from its research programme. The UKWIR research programme covers water, wastewater, sustainability, regulation, customers and asset management. In addition, we carry out research and development in-house, including solutions to improve the resilience of our water supplies, developing insight into the deterioration of critical assets, novel approaches to tackle leakage and pollutions from our water and wastewater networks respectively, and wastewater treatment processes to allow us to meet increasingly stringent regulatory requirements.

Expenditure on research and development totalled £12 million for the year (2020/21: £11 million).

Employee engagement

Over 80% of employees within the Kemble Water Holdings Group took part in our annual survey with an overall engagement score of 69% (2020/21: 75%). This demonstrates that our employees are willing to express how they are feeling about working at Thames Water – both the good aspects and what we can do to improve. Employees commented favourably on health and safety and diversity and inclusion. They also considered that their working environment enables them to perform effectively in their roles.

We continuously seek to listen to and act on feedback from our employees, putting voices into action throughout the year. Ian Pearson continues to act as designated Non-Executive Director for Workforce Engagement – to take accountability for ensuring that workforce issues are appropriately considered by the Board. Ian is supported in this by the other members of the Board who actively participate in engagement activities. This year, Ian held virtual employee engagement sessions and was able to get back onto sites to meet colleagues in person, providing employees with informal opportunities to meet with and be listened to by Board members.

The Thames Water Utilities Limited's Executive team reviews feedback from a variety of sources including our 'Hear for you' survey and joint meetings with our recognised trade unions (UNISON, GMB and Unite), as well as internal Yammer communications and local feedback channels. Further details on our overall people strategy can be found in the Strategic Report on page 4.

Recruitment, employment and training of disabled people

We are proud to be the first water company to be awarded Disability Confident Leader status, which we achieved in July 2019. This is a testament to our approach to attracting and retaining people with disabilities and long-term health conditions. We provide an automatic interview for people with disabilities who meet the essential criteria, and utilise alternative formats and reasonable adjustments at every stage, such as the use of British Sign Language interpreters.

Throughout 2021/22 we have continued to raise awareness, educate, improve accessibility and nurture a culture of inclusion. This has included adaptation to deliver training virtually, using auto captions, voice overs and alternative formats. We have additionally updated our access to work standards to make the process more seamless for candidates.

Our 'Hear for you' survey showed 68% employee engagement among those with disabilities or long-term health conditions (2020/21: 73%).

Operational Greenhouse Gas Emissions and Energy Management

Thames Water calculates their Greenhouse Gas emissions using the UK Water Industry Research Carbon Accounting Workbook ("CAW"). The CAW is the industry standard which is updated annually and is reflective of carbon reporting and emissions guidance from the Department of Environment, Food and Rural Affairs (Defra). Emissions from the greenhouse gases are standardised to global warming potential represented as carbon dioxide equivalents ("CO2e").

Operational Greenhouse Gas Emissions and Energy Management (continued)

The CAW calculations follow the Greenhouse Gas (GHG) Protocol's Carbon Reporting Standard. Under the GHG Protocol there are two distinct methods to account for Scope 2 emissions. Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

1. Location-based. This method reflects the average emissions intensity of the grid on which energy consumption occurs (using a grid-average emission factor data).
2. Market-based. This method reflects emissions from electricity that companies have purposefully chosen, and it derives emission factors from contractual instruments.

As Thames Water sources renewable electricity accredited with renewable 'Guarantees of Origin' through a contract with our supplier, Thames Water uses a market-based accounting approach to report their Scope 2 emissions. The market-based approach has been used to determine Thames Water's operational plans and strategies for carbon management and performance reporting on our journey to meet Net Zero. For transparency, we have also disclosed the location-based data within this report for comparison.

The Covid-19) pandemic and the resulting restrictions introduced in 2020 across the UK had impacted the water industry in various aspects, and these led to an 8% reduction in our net operational emissions in 2020/21. Now that we have entered post-pandemic recovery, we have seen a marginal increase of emissions across the business in 2021/22, however our net emissions are 20.7 kTCO₂e lower than pre-pandemic (2019/20). This represents a fall of 7%, when using a like-for-like methodology.

Our net operational emissions increased by 1.6 kTCO₂e in 2021/22, from 268.2 kTCO₂e in 2020/21 to 269.8 kTCO₂e in 2021/22, a rise of 0.6% when using a like-for-like methodology.

Key trends

In 2021/22 we have continued to focus on reducing our greenhouse gas emissions and improving our energy performance:

- Total Gross operational emissions have increased by 0.8%.
- We reduced our gross operational emissions for water services by 2.5 kTCO₂e, a fall of 8%.
- We reduced our use of fossil fuels by 5%, from 29.9 kTCO₂e to 28.3 kTCO₂e
- We reduced our total energy consumption by 24 GWh, from 1,605 GWh to 1,581 GWh
- And of that our total electricity consumption reduced by 16 GWh, from 1,265 GWh to 1,248 GWh
- We generated 24% of our electricity needs from on-site renewables
- We have increased our renewable generation from sludge by 13 GWh to 317 GWh
- We have increased our renewable heat generation by 21 GWh to 178 GWh.
- Together with our other renewables (Wind and Solar Photovoltaics (PV)), we have increased our energy generation by 34 GWh.

Where we're not able to produce our own renewable electricity, we continue to source Renewable Energy Guarantees of Origin ("REGO") accredited renewable electricity through contracts with our suppliers.

Our carbon targets

We have made a commitment to reduce our net carbon emissions from our operations to zero by 2030 and to then become net negative by 2040. We have already reduced our emissions by 68% compared to our 1990 baseline level. That is a 576 kTCO₂e absolute reduction.

We continue to work towards our target of being a net negative carbon business. Some of the key aims as part of this target include maximizing the energy and resource recovery from our sewage sludge, the electrification of our fleet of vehicles, and the increased efficiency of our assets.

Emissions

During 2021/22, our total gross operational emissions increased by 2.2 kTCO₂e to 277.3 kTCO₂e. Although our total emissions have increased, we have continued to reduce our consumption of fossil fuels, resulting in a fall of 1.6 kTCO₂e compared to last year.

Sludge production increased by 7% post-pandemic, resulting in an 8 kTCO₂e increase of our Wastewater and Sludge Process and Fugitive emissions. Despite this, we have still achieved 3 kTCO₂e reduction compared to 2019/20.

Our net operational emissions increased by 1.6 kTCO₂e to 269.8 kTCO₂e, a rise of 0.6%. However, we have achieved numerous successes that have minimised the increase in emissions through a combination of actions including:

- We have reduced our gasoil consumption used for pumping and treatment by 2.5 kTCO₂e
- Our CHP engines have also exported more renewable electricity when we did not need it ourselves, which has generated an additional 0.6 kTCO₂e carbon offset
- A 10% reduction in fossil fuel use in outsourced activities, saving 3 kTCO₂e

Since Covid-19 restrictions eased, we have seen an increase in the amount of sludge being received around London. This has been caused largely by the population returning to work and an increase in tourism in the city.

With more sewage sludge to be treated, we have seen a marginal increase of 0.2 kTCO₂e fossil fuel usage at the Sludge Powered Generator (SPG) at Beckon, our largest wastewater treatment site. However, by optimising the operation of the SPG, we have increased the renewable energy generated by 6 GWh in 2021/22.

Operational Greenhouse Gas Emissions and Energy Management (continued)

Emissions (continued)

We have also reduced the emissions associated with each megalitre (MI) of water and wastewater we supply and treat, and our emissions intensity.

1. Market based		
Water:	17 kgCO ₂ e per MI	down 1.8 kgCO ₂ e per MI (-10%)
Wastewater:	116.7 kgCO ₂ e per MI	down 4.7 kgCO ₂ e per MI (-4%)
2. Location-based		
Water:	129.7 kgCO ₂ e per MI	down 13.4 kgCO ₂ e per MI (-9%)
Wastewater:	161.28 kgCO ₂ e per MI	down 14.2 kgCO ₂ e per MI (-8%)

The emissions reported are associated with the operational emissions of the whole regulated operational business including our head offices and include:

- Scope 1 (Direct emissions)
- Scope 2 (Indirect energy use emissions)
- Scope 3 (Emissions from outsourced services and business travel)
- Carbon intensity ratios per megalitre day (MI/d) of service delivered.

	Market-based		Location -based	
	2021 kTCO ₂ e	2020 kTCO ₂ e	2021 kTCO ₂ e	2020 kTCO ₂ e
Scope 1	231.6	225.0	231.6	225.0
Direct emissions from burning of fossil fuels	28.3	29.9	28.3	29.9
Process and fugitive emission	191.6	183.5	191.6	183.5
Transport: Company owned or leased vehicles	11.7	11.6	11.7	11.6
Scope 2*	–	–	185.7	209.3
Purchased electricity	–	–	185.7	209.3
Scope 3	45.7	50.1	45.5	49.8
Business travel for company business	1.0	0.8	1.0	0.8
Outsourced activities	28.3	31.3	28.1	31.1
Purchased electricity –T&D	16.4	18.0	16.4	18.0
Gross	277.3	275.1	462.8	484.1
Net-offs	(7.5)	(6.9)	(5.0)	(4.6)
Net	269.8	268.2	457.8	*479.5

* Scope 2 – Renewable Energy Guarantees of Origin ("REGO") accredited renewable electricity purchased.

** 2020 location based net emissions re-stated due to change of methodology in CAW calculations

Energy

Supported by our ISO50001-certified Energy Management System, we have delivered energy efficiency improvements across both Water and Wastewater business units. We have reduced the net electricity intensity for each megalitre of water and wastewater we supply and treat.

Water:	523 kWh/MI	down 0.2%
Wastewater:	220 kWh/MI	down 13%

This was achieved through a series of actions including efficiencies and generation increases at several sites, notable examples being:

- At Crossness sewage treatment works, we have changed operation of the THP plant to priorities the use of biogas in the THP boilers. This has helped us reduce our fossil-fuel use at process level by 64% and save 2.2 kTCO₂e carbon emissions. At the same time, we increased the renewable heat produced by the THP process by 8.3 GWh to 28 GWh.
- At Ufton Nervet water treatment works, we have installed a new electrical system - Variable Speed Drives on the borehole and high lift pumps. VSD allows better control of pump flowrate, allowing site to cope with a dynamic demand more efficiently. The delivery of this investment saved approximately 437 MWh per year, which equates to the annual consumption of approximately 150 households.
- At Swinford Dam, we have installed new control for the pumps, allowing them to autonomously switch between gravity and pumped flow, as well as maintaining a constant pressure to reduce the amount of throttling visible under the previous operation.
- The energy efficiency project saved an approximately 280 MWh per year, which is equivalent to the annual consumption of nearly 100 homes.

Funding

In anticipation of our 2020 to 2025 investment programme, during the year ended 31 March 2019 TWUL Group increased the size of its Revolving Credit Facility (RCF) from £950 million to around £1.65 billion, and in November 2020 extended the maturity of £1.44 billion of that facility by one year from 2024 to 2025. Throughout the year, total new debt issuance and facilities of £1,342 million equivalent were completed in TWUL Group, as follows:

- in June 2021 TWUF entered into a £200 million Class B loan agreement due 2026 which was fully drawn in September 2021;
- in September 2021 TWUL entered into a £100 million Class B loan agreement due 2028 which remains undrawn;
- in December 2021 TWUF entered into a £75 million Class B loan agreement due 2025 which was fully drawn in March 2022;
- in January 2022 TWUF issued £967 million equivalent of public debt through a €575 million bond due 2028 and a €575 million bond due 2032;

Since 31 March 2022, TWUL has further strengthened its financing position by entering into a £150 million Class B loan facility due April 2029, a £50 million Class B loan facility due August 2025 and a £100 million Class A loan facility due May 2029, all of which are currently undrawn. Since 31 March 2022, £350 million of the Class A RCF has been drawn and the following debt has been repaid:

- £371 million Class B RCF
- £63 million Class A loan due March 2027
- £12 million of £63 million Class A loan due March 2029
- £50 million Class A loan due May 2022.

Disclosure of information to the auditor

In accordance with Section 418 of the Companies Act 2006, the Directors who held office at the date of approval of this Directors' report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditors are unaware; and each Director has taken all the steps that they ought to have taken as Director to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Independent auditors

Pursuant to section 487 of the Companies Act 2006, the auditors, PricewaterhouseCoopers LLP, have indicated their willingness to continue in office and a resolution concerning their reappointment will be proposed at the Annual General Meeting.

Approved by the Board of Directors on 5 July 2022 and signed on its behalf by

P Noble
Director

Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Statement of directors' responsibilities in respect of the financial statements

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the group and the company financial statements in accordance with UK-adopted international accounting standards.

Under company law, 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 company and of the profit or loss of the group for that period. In preparing the financial statements, the directors are required to:

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

The directors are responsible for safeguarding the assets of the group and company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are also responsible for keeping adequate accounting records that are sufficient to show and explain the group's and company's transactions and disclose with reasonable accuracy at any time the financial position of the group and company and enable them to ensure that the financial statements comply with the Companies Act 2006.

The directors are responsible for the maintenance and integrity of the company's financial statements published on the ultimate parent company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

P Noble
Director
05 July 2022

Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Independent auditors' report to the members of Kemble Water Finance Limited

Report on the audit of the financial statements

Opinion

In our opinion, Kemble Water Finance Limited's group financial statements and company financial statements (the "financial statements"):

- give a true and fair view of the state of the group's and of the company's affairs as at 31 March 2022 and of the group's loss and the group's and company's cash flows for the year then ended;
- have been properly prepared in accordance with UK-adopted international accounting standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual report and consolidated financial statements (the "Annual Report"), which comprise: the consolidated and company statements of financial position as at 31 March 2022; the consolidated income statement, the consolidated statement of other comprehensive income, the consolidated and company statements of cash flows, and the consolidated and company statements of changes in equity for the year then ended; the accounting policies; and the notes to the financial statements.

Our opinion is consistent with our reporting to the Kemble Water Holdings Board.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided.

Other than those disclosed in Note 2 of the financial statements, we have provided no non-audit services to the company or its controlled undertakings in the period under audit.

Our audit approach

Overview

Audit scope

- Two significant components within the group are subject to a full scope audit; Thames Water Utilities Limited and Thames Water Utilities Finance Plc.
- Two additional entities, Kemble Water Finance Limited and Thames Water (Kemble) Finance Plc, were considered in scope for certain financial statement line items, to obtain sufficient coverage of the cash, borrowings and finance expenses of the group.
- For the company only accounts and the significant components we tested both the design and operation of relevant business process controls and performed substantive testing over material financial statement line items.

Key audit matters

- Valuation of financial derivatives (group)
- Valuation of provision for expected credit losses on trade receivables (group)
- Valuation of retirement benefit obligation (group)
- Classification of costs between capital and operating expenditure (group)
- Valuation of metered sales accrual (group)
- Investment in Subsidiaries (parent)
- Valuation of Goodwill (group)

Materiality

- Overall group materiality: £30,000,000 (2021: £30,000,000) based on 0.14% of total assets.
- Overall company materiality: £51,301,000 (2021: £53,500,000) based on 1% of total assets.
- Performance materiality: £22,500,000 (2021: £22,500,000) (group) and £38,400,000 (2021: £40,100,000) (company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, 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. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

This is not a complete list of all risks identified by our audit.

Valuation of the metered sales accrual is a new key audit matter this year. The impact of COVID-19, which was a key audit matter last year, is no longer included because the immediate operational and financial impact of the pandemic to the Group is now better understood and the impact in terms of our audit approach is now integrated into the specific key audit matters individually. Otherwise, the key audit matters below are consistent with last year.

Key audit matter	How our audit addressed the key audit matter
<p><i>Valuation of financial derivatives (group)</i></p> <p>The group derivative position as at 31 March 2022 was an asset of £192.1m (2021: £163.4m) and a liability of £2,341.7m (2021: £1,469.9m). The net derivative fair value as at 31 March 2022 was a liability of £2,149.6m (2021: £1,306.5m).</p> <p>The valuation of derivatives is designated as a significant risk as the total fair value of the derivative contracts are material, the valuation methodology can be judgemental and some of the contracts are unusual, complex or long dated which can cause additional complexities.</p> <p>Refer to note 20 of the financial statements.</p>	<p>Our procedures included:</p> <p>Obtaining independent confirmations from the external counterparties and contracts to confirm the existence and terms of all derivative contracts held.</p> <p>Engaging with our valuations team who have performed independent testing of the pre and post-credit risk adjusted valuations for the full derivative population.</p> <p>Performing procedures to assess the validity of assumptions and calculations management have made in performing the credit risk component of fair value.</p> <p>Performing an analysis of the directional movement in the pre-credit risk adjusted derivative position relative to movements in inflation, exchange rates and interest rates.</p> <p>Testing management controls in operation to reconcile the derivative valuations to those provided by the external counterparties.</p> <p>Overall, we consider that the valuation methodology and judgements management have used are reasonable and the fair values recorded at the balance sheet date are appropriate.</p>
<p><i>Valuation of provision for expected credit losses on trade receivables (group)</i></p> <p>The recoverability of customer debts is always a key issue for water companies as the calculation involves significant judgement and estimation. The provision for expected credit losses on trade receivables amounted to £150.5m (2021: £146.3m).</p> <p>Management primarily uses historical performance to determine the future collectability of trade receivables. The level of uncollectable debt is determined based on performance in the year with the assumption that performance will repeat in future years. Their model takes the closing household debtors balance and then deducts the amount that will be collected or cancelled based on historical performance. The amount that remains will be uncollectable, which forms the expected credit loss debt provision. The provision includes an additional overlay in the current year, consistent with prior year, to reflect the impact of macroeconomic factors, such as the cost-of-living crisis. This involves a high degree of estimation uncertainty. Management have also considered plausible downside scenarios in assessing the impact of macroeconomic factors on the receivable balance. Refer to note 16 of the financial statements.</p>	<p>We evaluated the model used to calculate the core provision and confirmed its consistency with prior years, specifically that the primary inputs relate to the previous year's cash collection by ageing category applied to the ageing category as at 31 March 22, with an overlay added to address the potential future credit loss related to factors over and above past performance. In the current year, this primarily related to the cost-of-living crisis. We consider the construct of the model appropriate and in line with the requirements of IFRS 9.</p> <p>We also tested the underlying data upon which the calculations were based and assessed the appropriateness of the judgements applied in calculating the provision, using the latest available cash collection, cancellation and rebill data for the current year.</p> <p>We re-performed the calculations used in the model, to ensure the accuracy of these calculations.</p> <p>We challenged management's assumptions used in the model and tested a sample of inputs. We also tested a sample of receivables to validate the aging classifications used in the model.</p> <p>We assessed management's considerations in respect of macroeconomic factors such as the cost of living crisis, and tested the additional overlay provision. We challenged management's assumptions with regards to the impact of macroeconomic factors on the future cash flows and recoverability of trade receivables based on our understanding of the business and industry knowledge. In addition, we performed sensitivity analysis on the downside scenarios considered by management, which included a greater impact on future cash collection driven by the impact of the cost-of-living crisis. The result of the sensitivity analysis showed that the downside scenario considered by management is reasonable and did not have a material impact on the outcome of management's assessment. We also assessed the adequacy of disclosures in the notes to the financial statements of the key judgements and estimates involved in the provision for expected credit losses and the impact of macroeconomic factors on trade receivables.</p> <p>Overall, we consider that the provision and disclosure for expected credit losses as at 31 March 2022 is reasonable.</p>

<p><i>Valuation of retirement benefit obligation (group)</i></p> <p>Valuation of the group's TWPS and TWMIPS defined benefit pension schemes with total scheme liabilities of £2,584.1m (2021: £2,721.0m). The valuation of retirement benefit obligations requires significant levels of judgement and technical expertise, including the use of actuarial experts to support management in selecting appropriate assumptions. Small changes in a number of the key financial and demographic assumptions used to value the retirement benefit obligation, (including discount rates, inflation rates and mortality expectations) could have a material impact on the calculation of the liability. The pension liability and disclosures are also an area of interest to key stakeholders. Refer to note 24 of the financial statements.</p>	<p>We used our own actuarial experts to evaluate the assumptions made in relation to the valuation of the scheme liabilities. We benchmarked the various assumptions used (e.g., discount, inflation rates and mortality assumptions) and compared them to our internally developed benchmarks; assessed the salary increase assumption against the group's historical trends and expected future outlook; and considered the consistency and appropriateness of methodology and assumptions applied compared to the prior year end. The last formal triennial valuation took place as at 31st March 2019 and this has been used in the calculation of the defined benefit obligation although the actuary has refined their calculation for information received from the scheme actuary. This information comes in the form of the underlying cashflows from the triennial valuation. In order to get comfortable with this approach and conclude that the accounting liabilities are reasonable, we have performed an independent roll forward from the valuation results to the accounting results and were able to agree to within materiality levels.</p> <p>Overall, we concur that the methodology and assumptions used by management at 31 March 2022 are reasonable.</p>
<p><i>Classification of costs between capital and operating expenditure (group)</i></p> <p>Additions to Assets under construction (AUC) during the period amounted to £1,233.8m (2021: £1,021.4m). Within this is £226.7m (2021: £219.8m) of own works capitalised and £114.8m (2021: £69.7m) of borrowing costs incurred with the remainder being external costs. There is a high degree of judgement applied when allocating costs between operating and capital expenditure given the nature of certain projects which include both repairs and maintenance as well as asset enhancement. There is therefore the potential for misstatement between the income statement and the statement of financial position. In addition, internal expenditure including staff costs to support capital projects is capitalised only if it can be demonstrated that it is directly attributable to the asset, provides probable economic benefit to the company and can be measured reliably.</p> <p>There is a risk that costs capitalised do not meet these criteria. Refer to note 12 of the financial statements.</p>	<p>We have tested the controls regarding the assessment by management of whether a project is either operating or capital in nature.</p> <p>For a sample of projects open during the financial year we ensured that the classification of expenditure into capital or operating is consistent with how this has been classified in the financial statements.</p> <p>We performed sample testing at an individual expense level of costs classified within both AUC additions and those shown as repairs and maintenance accounts in the period. We then agreed these to third party evidence to verify the amount and so to assess whether the costs have been classified appropriately.</p> <p>We tested the borrowing costs calculation and the appropriateness of qualifying projects involved.</p> <p>Our procedures over own works capitalised included:</p> <p>We tested the control process over assessing the level of spend incurred by each cost centre that should be capitalised.</p> <p>We obtained management's assessments of what spend by cost centre should be capitalised and noted that a consistent approach to the prior year has been used, adequate consideration at an individual cost centre level is being applied and that there is no indication of bias.</p> <p>We performed sample testing at a cost centre level and challenged management as to the nature of these costs and whether they meet the capitalisation criteria.</p> <p>Overall, we consider that the judgements management have made over the classification of costs as operating or capital are reasonable at 31 March 2022 and assumptions used in calculating relevant costs to be capitalised to be appropriate.</p>
<p><i>Valuation of metered sales accrual (group)</i></p> <p>The metered sales accrual (MSA) for household properties amounted to £183.8m (2021: £176.7m) and represents the sales accrual for customers who have not been billed for their usage up until 31 March 2022. The valuation of the accrual depends on the volume of water and wastewater consumed between the date of the last bill and the year end, applied to the tariff rates effective for that period.</p> <p>The estimated water consumption for measured customers is primarily based on historical consumption data. The billing system calculates the accrual using the latest meter read data available in the billing system. Management also apply a manual adjustment to the system generated accrual to adjust the accrual</p>	<p>We obtained and understood management's calculation for determining the level of adjustment applied to reflect actual consumption from customers in the year. We have re-performed management's calculation and tested its mathematical accuracy.</p> <p>We have performed a retrospective review of bills raised during 2021/22 related to the 2020/21 MSA balance to assess management's forecasting accuracy. We consider management's forecasting to be accurate.</p> <p>We have performed substantive analytical procedures comparing the increase in the number of metered properties, consumption and tariff changes to the increase in the overall MSA balance including the overlay</p>

<p>for system limitations, for example lack of a recent meter read. Management consider factors such as consumption data from Smart meters, and also historic consumption levels along with considering macroeconomic drivers such as COVID-19 driven changes in consumption patterns in forming the final MSA. The manual adjustment requires increased levels of judgement from management in determining the most appropriate consumption rate to be used in their calculation. Incorrect estimates of water consumption could lead to a misstatement of revenue recognised for the year.</p> <p>The key audit matter is focussed on the judgements made by management in estimating consumption and the resulting manual adjustments which generate the MSA estimate.</p> <p>Refer to note 16 of the financial statements.</p>	<p>adjustment. This did not result in a materially different amount to that recognised by management.</p> <p>We assessed and validated the average daily consumption (ADC) inputs being used by management and whether these were appropriate in the context of all available data points such as smart meter consumption data and actual meter read information of non-smart meters. By using the billing listings we formed a range of reasonable adjustment values based on the alternative data points and confirmed the management ADC rate fell within this range. We have validated the meter read values within the billing listings we used by agreeing a sample of reads back to the corresponding invoice.</p> <p>From our procedures performed, we concluded that the management's estimates in relation to the MSA as at 31 March 2022 is reasonable.</p>
<p><i>Investment in Subsidiaries (parent)</i></p> <p>Investments at 31 March 2022 is £4,292.3m (2021: £4,292.3m) and is required to be assessed annually for impairment. The assessment is based on the deemed recoverable amount compared to the book value and requires the use of significant estimates which are subjective. The key estimates and assumptions assessed include the Regulatory Capital Value (RCV) and the expected premium on RCV that an investor or consortium would pay to purchase the TWUL group. Refer to note 33 of the financial statements.</p>	<p>Our procedures included:</p> <p>Obtaining management's model and verifying the mathematical accuracy of calculations used.</p> <p>We have reviewed the assessment management have performed to determine the premium on RCV and determined that the assessment performed is reasonable.</p> <p>We have agreed the net debt used in management's assessment at 31 March 2022 which is deducted from the RCV to generate management's estimated valuation to the audited financial statements.</p> <p>We have verified the RCV used by management to the latest Ofwat publication.</p> <p>Overall, we concur with the assessment that management have made and that there is no impairment at 31 March 2022.</p>
<p><i>Valuation of Goodwill (group)</i></p> <p>Goodwill at 31 March 2022 is £1,468.1m (2021: £1,468.1m) and is required to be assessed annually for impairment. The assessment is based on the deemed recoverable amount compared to the book value and requires the use of significant estimates which are subjective. The key estimates and assumptions assessed include the Regulatory Capital Value (RCV) and the expected premium on RCV that an investor or consortium would pay to purchase the TWUL group. Refer to note 9 of the financial statements.</p>	<p>Our procedures included:</p> <p>Obtaining management's model and verifying the mathematical accuracy of calculations used.</p> <p>We have reviewed the assessment management have performed to determine the premium on RCV and determined that the assessment performed is reasonable.</p> <p>We have agreed the net debt used in management's assessment at 31 March 2022 to the audited financial statements.</p> <p>We have also verified the RCV used by management to the latest Ofwat publication.</p> <p>Overall, we concur with the assessment that management have made and that there is no impairment at 31 March 2022.</p>

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the group and the company, the accounting processes and controls, and the industry in which they operate.

Our scoping is based on the group's consolidation structure. We define a component as a single reporting unit which feeds into the consolidation. Two legal entities in the group were considered financially significant and therefore subject to full scope audits for group purposes; Thames Water Utilities Limited due to holding the significant proportion of the group's total assets and all its trade and Thames Water Utilities Finance Plc due to holding a significant amount of the group's external debt.

Two additional entities, Kemble Water Finance Limited and Thames Water (Kemble) Finance Plc, were considered in scope for certain financial statement line items, in order to obtain sufficient coverage of the cash, borrowings and finance expenses of the group. We additionally obtained full coverage over the consolidation journal entries for the group.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

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

	Financial statements - group	Financial statements - company
<i>Overall materiality</i>	£30,000,000 (2021: £30,000,000).	£51,301,000 (2021: £53,500,000).
<i>How we determined it</i>	0.14% of total assets	1% of total assets
<i>Rationale for benchmark applied</i>	Total assets has been determined to be the appropriate benchmark for both significant components of the group, therefore group materiality will also be based on total assets. For Public Interest Entities (PIE) a percentage of up to 1% of total assets is typical. However, we have considered multiple factors and given due consideration to other benchmarks, using the lower percentage of 0.14% of total group assets was deemed to be most appropriate.	Total assets has been determined to be the appropriate benchmark for the company as it is a holding company with no revenue of its own. For Public Interest Entities (PIE) a percentage of 1% of total assets is typical.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was £25.5 million and £28.5 million. Certain components were audited to a local statutory audit materiality that was also less than our overall group materiality.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% (2021: 75%) of overall materiality, amounting to £22,500,000 (2021: £22,500,000) for the group financial statements and £38,475,750 (2021: £40,100,000) for the company financial statements.

In determining the performance materiality, we considered a number of factors - the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls - and concluded that an amount at the upper end of our normal range was appropriate.

We agreed with the Kemble Water Holdings Board that we would report to them misstatements identified during our audit above £3.0 million (group audit) (2021: £3.0 million) and £5.1 million (company audit) (2021: £2.9 million) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the directors' assessment of the group's and the company's ability to continue to adopt the going concern basis of accounting included:

- Testing the mathematical integrity of the cash flow forecasts and the models supporting the forecasts used by management to support their going concern assumption and reconciling these to Board approved budgets.
- Understanding the key assumptions management have applied in developing their base case and downside scenarios where it was assessed there was sufficient headroom to the event of default threshold. These can be split as those that are more judgemental in nature and those that are less judgemental. For those less judgemental assumptions such as revenue growth, we verified this to published tariffs for FY23 in compliance with Ofwat's policies. For those more judgemental assumptions such as power costs which is a largely non-discretionary cost subject to volatility, we understood the basis on which management had made these assumptions. We challenged various aspects of management's base case and downside scenarios, including how management have created their plausible but severe downside case as a combination of various individual scenarios. We concluded that the base case was reasonable and the downside case appropriately plausible but severe.
- Performing a comparison of budget versus actual for the year ended 31 March 2022 and understanding where variances had arisen. Through this testing we obtained reasonable assurance over management's ability to forecast accurately. The most significant operating cashflow variances noted were in relation to power costs incurred driven by the global volatility in power costs in the year ended 31 March 2022.
- Developing our own scenario based on taking the FY22 operating cashflow and adjusting for those positive cashflow movements we considered to be less judgemental. We then considered the level of additional spend that would need to be incurred in excess of the FY22 actuals for a breach to occur on the PMICR covenant assuming no mitigating actions from management. From this assessment we concluded that it was unlikely that expenditure could be at a level to lead to a covenant breach.
- Verifying liquidity forecasts to the Board approved budget and testing that contractual debt principal and interest payments had been appropriately included within the forecasts. We considered the headroom of expected cash outflows in the going concern period against available liquidity, identifying a reasonable level of expenditure to allow for unexpected spend.
- Obtaining and understanding the terms of the Group's financing and credit facilities, the Whole Business Securitisation, and in particular the financial covenants that the Group must adhere to. We have verified the existence of the facilities in place on which management has based its liquidity forecast for a period of in excess of 12 months from the date of the approval of the 31 March 2022 financial statements (the going concern period).
- Obtaining covenant compliance certificates, confirming that all the key covenants that impact the continued access to finance have been considered over the relevant time periods and verifying the mathematical accuracy, and testing inputs back to either the year end financial numbers or for forecasted information to the Board approved budget.
- Obtaining the latest credit ratings for the TWUL and KWF group and verifying that the Group maintained an investment grade rating and therefore taking reasonable assurance that the Group should still be able to access capital markets as required.
- Assessing the disclosure given in the financial statements in respect of going concern and whether it gives a fair and balanced view.

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

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

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the group's and the company's ability to continue as a going concern.

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

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report certain opinions and matters as described below.

Strategic report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic report and Directors' Report for the year ended 31 March 2022 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the group and company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' responsibilities in respect of the financial statements, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also 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.

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

Auditors' responsibilities for the audit of the financial statements

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

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

Based on our understanding of the group and industry, we identified that the principal risks of non-compliance with laws and regulations related to Ofwat Regulations including licence conditions, Environmental regulations, Listing rules and Pension legislation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as Tax legislation and the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to the posting of journal entries to manipulate the financial results in the year to create additional headroom for covenant compliance, specifically journals to increase revenue, decrease the bad debt provision and reclassify costs from the income statement to property, plant and equipment. We have also considered the risk of management bias in forming its significant accounting judgements or estimates and in the related disclosures. Audit procedures performed by the engagement team included:

- Discussions and inquiries of management, the internal audit function and legal counsel, including consideration of known or suspected instances of non-compliance with laws and regulation and fraud;
- Evaluation of management's controls designed to prevent and detect irregularities;
- Challenging assumptions made by management in determining significant accounting estimates and judgements, including challenging management in relation to how they have considered climate risk in such critical estimates. In particular we challenged the significant accounting estimates and judgements in relation to the Key Audit Matters as set out in our report along with provisions and contingent liabilities as detailed in notes 22 and 26 respectively. We have tested significant accounting estimates and judgements to supporting documentation, considering alternative information where available along with considering the appropriateness of the related disclosures in the financial statements;

- Identifying and testing a sample of journal entries throughout the whole year, which met our pre-determined fraud risk criteria;
- Reviewing minutes of meetings of those charged with governance and reviewing internal audit reports.
- Performing unpredictable procedures by sampling non-standard payments, the set up of new suppliers, vendor detail changes and reviewing journal entries from unexpected users.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

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

Use of this report

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

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

- we have not obtained all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the company financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Kemble Water Holdings Board, we were appointed by the directors on 27 June 2018 to audit the financial statements for the year ended 31 March 2019 and subsequent financial periods. The period of total uninterrupted engagement is 4 years, covering the years ended 31 March 2019 to 31 March 2022.

Katharine Finn (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Reading
5 July 2022

Consolidated income statement

For the year ended 31 March 2022

	Note	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Revenue	1	2,092.1	84.9	2,177.0	2,033.0	73.8	2,106.8
Operating expenses excluding impairment losses on financial and contract assets ¹	2	(1,857.3)	-	(1,857.3)	(1,727.6)	-	(1,727.6)
Impairment losses on financial and contract assets	2	(10.1)	(0.1)	(10.2)	(36.5)	(0.2)	(36.7)
Total operating expenses	2	(1,867.4)	(0.1)	(1,867.5)	(1,764.1)	(0.2)	(1,764.3)
Other operating income	4	96.8	-	96.8	122.2	-	122.2
Operating profit		321.5	84.8	406.3	391.1	73.6	464.7
Finance income	5	121.0	-	121.0	174.7	-	174.7
Finance expense	6	(1,272.3)	-	(1,272.3)	(1,065.0)	-	(1,065.0)
Net losses on financial instruments	7	(895.5)	-	(895.5)	(524.9)	-	(524.9)
(Loss)/profit on ordinary activities before taxation		(1,725.3)	84.8	(1,640.5)	(1,024.1)	73.6	(950.5)
Taxation (charge)/credit on (loss)/profit on ordinary activities	8	7.3	(16.1)	(8.8)	192.8	(14.0)	178.8
(Loss)/profit for the year		(1,718.0)	68.7	(1,649.3)	(831.3)	59.6	(771.7)

¹ Underlying operating expenses for the year ended 31 March 2022 includes £nil amount (2021: £16.3 million) of costs that are considered to be exceptional. A summary of exceptional costs is included within note 2.

The Group activities above are derived from continuing activities.

Bazalgette Tunnel Limited ("BTL") is an independent company, appointed in 2015 to construct the Thames Tideway Tunnel. We have recognised revenue, cost and profit on the arrangement with BTL and have disclosed our underlying performance separately as required by some of our financial covenants. Information on how the Group accounts for this arrangement is detailed in the accounting policies on page 46.

Consolidated statement of comprehensive income

For the year ended 31 March 2022

	Note	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
(Loss)/profit for the year		(1,718.0)	68.7	(1,649.3)	(831.3)	59.6	(771.7)
Other comprehensive (loss)/income							
<i>Will not be reclassified to the income statement:</i>							
Net actuarial loss on pension schemes	24	(22.9)	-	(22.9)	(195.6)	-	(195.6)
Deferred tax credit on net actuarial loss		11.8	-	11.8	43.2	-	43.2
Impact of tax rate change in respect of net actuarial loss		31.1	-	31.1	-	-	-
<i>May be reclassified to the income statement:</i>							
Cash flow hedges transferred to income statement	20	31.1	-	31.1	37.5	-	37.5
Deferred tax charge on cash flow hedges including impact of tax rate change in current year		(4.5)	-	(4.5)	(7.1)	-	(7.1)
Other comprehensive income/(loss) for the year		46.6	-	46.6	(122.0)	-	(122.0)
Total comprehensive (loss)/income for the year		(1,671.4)	68.7	(1,602.7)	(953.3)	59.6	(893.7)

Bazalgette Tunnel Limited ("BTL") is an independent company, appointed in 2015 to construct the Thames Tideway Tunnel. We have recognised revenue, cost and profit on the arrangement with BTL and have disclosed our underlying performance separately as required by some of our financial covenants. Information on how the Group accounts for this arrangement is detailed in the accounting policies on page 46.

Consolidated statement of financial position

As at 31 March 2022

	Note	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Non-current assets							
Goodwill	9	1,468.1	-	1,468.1	1,468.1	-	1,468.1
Intangible assets	11	285.0	-	285.0	276.5	-	276.5
Property, plant and equipment	12	17,372.7	-	17,372.7	16,746.7	-	16,746.7
Investment property ¹	13	50.0	-	50.0	50.0	-	50.0
Right of use asset	14	45.8	-	45.8	41.6	-	41.6
Prepayments	16	-	308.8	308.8	-	228.9	228.9
Insurance and other receivables	16	45.8	-	45.8	51.4	-	51.4
Pension asset TWMIPS	24	12.0	-	12.0	57.9	-	57.9
Derivative financial assets	20	169.2	-	169.2	151.1	-	151.1
		19,448.6	308.8	19,757.4	18,843.3	228.9	19,072.2
Current assets							
Inventories	15	13.0	-	13.0	14.9	-	14.9
Contract assets	16	251.7	8.5	260.2	240.0	5.8	245.8
Trade receivables	16	301.9	14.0	315.9	298.1	12.0	310.1
Intercompany receivables	16	188.9	(36.2)	152.7	268.5	(20.1)	248.4
Prepayments	16	36.9	-	36.9	38.4	-	38.4
Other receivables and amounts owed by group undertakings	16	37.5	1.0	38.5	30.3	0.8	31.1
Cash and cash equivalents	17	697.3	5.2	702.5	803.2	3.6	806.8
Derivative financial assets	20	22.9	-	22.9	12.3	-	12.3
		1,550.1	(7.5)	1,542.6	1,705.7	2.1	1,707.8
Current liabilities							
Contract liabilities	18	(125.1)	(2.0)	(127.1)	(121.9)	(2.1)	(124.0)
Trade and other payables	18	(661.7)	(13.0)	(674.7)	(607.1)	(11.4)	(618.5)
Lease liabilities	14	(6.2)	-	(6.2)	(7.5)	-	(7.5)
Borrowings	19	(887.1)	-	(887.1)	(1,146.1)	-	(1,146.1)
Derivative financial liabilities	20	(103.0)	-	(103.0)	-	-	-
		(1,783.1)	(15.0)	(1,798.1)	(1,882.6)	(13.5)	(1,896.1)
Net current (liabilities)		(233.0)	(22.5)	(255.5)	(176.9)	(11.4)	(188.3)
Non-current liabilities							
Contract liabilities	18	(831.8)	-	(831.8)	(757.3)	-	(757.3)
Lease liabilities	14	(57.1)	-	(57.1)	(52.9)	-	(52.9)
Borrowings	19	(21,453.4)	-	(21,453.4)	(20,191.9)	-	(20,191.9)
Derivative financial liabilities	20	(2,238.7)	-	(2,238.7)	(1,469.9)	-	(1,469.9)
Deferred tax	21	(1,124.2)	-	(1,124.2)	(1,033.6)	-	(1,033.6)
Provisions for liabilities and charges	22	(186.3)	-	(186.3)	(145.0)	-	(145.0)
Pension deficit	24	(264.5)	-	(264.5)	(284.7)	-	(284.7)
		(26,156.0)	-	(26,156.0)	(23,935.3)	-	(23,935.3)
Net (liabilities)/assets		(6,940.4)	286.3	(6,654.1)	(5,268.9)	217.5	(5,051.4)
Equity							
Called-up share capital	23	1.0	-	1.0	1.0	-	1.0
Cash flow hedge reserve	23	(33.2)	-	(33.2)	(59.8)	-	(59.8)
(Accumulated losses) / retained earnings	23	(6,908.2)	286.3	(6,621.9)	(5,210.1)	217.5	(4,992.6)
Total equity		(6,940.4)	286.3	(6,654.1)	(5,268.9)	217.5	(5,051.4)

¹Assets of £50.0 million which meet the definition of Investment Properties under IAS 40 have been reclassified from Property, Plant and Equipment and disclosed separately in the statement of financial position as at 31 March 2022, with the prior period comparative at 31 March 2021 also reclassified. Please refer to Note 12 Property, Plant and Equipment for further information.

Bazalgette Tunnel Limited ("BTL") is an independent company, appointed in 2015 to construct the Thames Tideway Tunnel. We have recognised amounts in the statement of financial position in relation to the arrangement with BTL and have disclosed our underlying amounts separately as required by some of our financial covenants. Information on how the Group accounts for this arrangement is detailed in the accounting policies on page 46.

The consolidated financial statements (which include the accompanying accounting policies and notes) for Kemble Water Finance Limited, registered in England & Wales company number 05819317, were approved by the Board of Directors on 5 July 2022 and signed on its behalf by:

P Noble, Director

Company statement of financial position

As at 31 March 2022

	Note	2022 £m	2021 £m
Non-current assets			
Investment in subsidiaries	33	4,292.3	4,292.3
Trade and other receivables	34	0.3	0.5
Intercompany receivables	34	331.8	417.0
Deferred tax assets	35	6.1	6.7
		4,630.5	4,716.5
Current assets			
Intercompany receivables	34	265.6	352.1
Cash and cash equivalents	36	249.8	286.5
		515.4	638.6
Current liabilities			
Trade and other payables	37	(0.2)	(1.7)
Borrowings	39	(138.0)	(21.0)
		(138.2)	(22.7)
Net current assets		377.2	615.9
Non-current liabilities			
Trade and other payables	37	-	(0.3)
Borrowings	39	(8,909.3)	(8,607.1)
		(8,909.3)	(8,607.4)
Net liabilities		(3,901.6)	(3,275.0)
Equity			
Called-up share capital		1.0	1.0
Accumulated losses		(3,902.6)	(3,276.0)
Total equity		(3,901.6)	(3,275.0)

As permitted by Section 408 of the Companies Act 2006, no income statement is presented for the parent Company. For the year ended 31 March 2022 the Company generated a loss after taxation of £626.6 million (2021: loss after taxation of £556.6 million)

The financial statements (which include the accompanying accounting policies and notes) for Kemble Water Finance Limited, registered in England & Wales company number 05819317, were approved by the Board of Directors on 5 July 2022 and signed on its behalf by:

P Noble
Director

Consolidated statement of changes in equity

For the year ended 31 March 2022

	Called-up share capital £m	Cash flow hedge reserve £m	Accumulated losses £m	Total equity £m
At 1 April 2020	1.0	(90.2)	(4,068.5)	(4,157.7)
Loss for the year	-	-	(771.7)	(771.7)
Cash flow hedges transferred to income statement	-	37.5	-	37.5
Deferred tax charge on cash flow hedges	-	(7.1)	-	(7.1)
Actuarial loss on pension schemes	-	-	(195.6)	(195.6)
Deferred tax credit on actuarial loss	-	-	43.2	43.2
At 31 March 2021	1.0	(59.8)	(4,992.6)	(5,051.4)
Loss for the year	-	-	(1,649.3)	(1,649.3)
Cash flow hedges transferred to income statement	-	31.1	-	31.1
Deferred tax charge on cash flow hedges including impact of tax rate change	-	(4.5)	-	(4.5)
Actuarial loss on pension schemes	-	-	(22.9)	(22.9)
Deferred tax credit on net actuarial loss	-	-	11.8	11.8
Impact of tax rate change in current year in respect of net actuarial loss	-	-	31.1	31.1
At 31 March 2022	1.0	(33.2)	(6,621.9)	(6,654.1)

Company statement of changes in equity

For the year ended 31 March 2022

	Called-up share capital £m	Accumulated losses £m	Total equity £m
At 1 April 2020	1.0	(2,719.4)	(2,718.4)
Loss for the year	-	(556.6)	(556.6)
At 31 March 2021	1.0	(3,276.0)	(3,275.0)
Loss for the year	-	(626.6)	(626.6)
At 31 March 2022	1.0	(3,902.6)	(3,901.6)

Consolidated statement of cash flows

For the year ended 31 March 2022

	Note	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Cash generated from operations ¹	29	1,407.8	1.6	1,409.4	929.4	1.0	930.4
Overseas tax paid		-	-	-	(0.5)	-	(0.5)
Net cash generated by operating activities		1,407.8	1.6	1,409.4	928.9	1.0	929.9
Investing activities:							
Interest received		110.0	-	110.0	178.8	-	178.8
Decrease in current asset investments		-	-	-	300.0	-	300.0
Purchase of property, plant and equipment		(1,271.7)	-	(1,271.7)	(1,050.2)	-	(1,050.2)
Purchase of intangible assets		(72.3)	-	(72.3)	(54.8)	-	(54.8)
Proceeds from sale of property, plant and equipment		1.3	-	1.3	10.6	-	10.6
Net cash used in investing activities		(1,232.7)	-	(1,232.7)	(615.6)	-	(615.6)
Financing activities:							
New loans raised ²		3,585.4	-	3,585.4	2,071.6	-	2,071.6
Repayment of borrowings ³		(3,321.5)	-	(3,321.5)	(1,981.0)	-	(1,981.0)
Interest paid		(554.7)	-	(554.7)	(376.5)	-	(376.5)
Fees paid		(0.9)	-	(0.9)	(12.7)	-	(12.7)
Repayment of lease principal		(9.9)	-	(9.9)	(11.4)	-	(11.4)
Derivative settlement ⁴		20.6	-	20.6	(15.3)	-	(15.3)
Net cash used in financing activities		(281.0)	-	(281.0)	(325.3)	-	(325.3)
Net (decrease)/increase in cash and cash equivalents		(105.9)	1.6	(104.3)	(12.0)	1.0	(11.0)
Net cash and cash equivalents at beginning of year		803.2	3.6	806.8	815.2	2.6	817.8
Net cash and cash equivalents at end of year		697.3	5.2	702.5	803.2	3.6	806.8

¹ Cash generated by operating activities for the year ended 31 March 2022 includes £nil (2021: £69.7 million of) payments that are considered to be exceptional. This exceptional outflow was related to the remaining pension deficit repayments covering AMP7 for the Thames Water Pension Scheme. Excluding this exceptional cash payment, underlying cash generated by operating activities would be £999.1 million for the year ended 31 March 2021. If this prepayment had not been made then the underlying cash generated by operating activities for the year ended 31 March 2022 would be £1,383.1 million, which would have included a cash payment of £24.7 million.

² New loans raised of £3,585.4 million includes £2,430.0 million of drawdowns relating to revolving credit facilities including £1,770.0 million Class A and £660.0 million Class B. The remaining amount includes £958.0 million (net of fees) relating to bond issuances and £197.4 million (net of fees) relating to loans raised.

³ Repayment of borrowings of £3,321.5 million includes £2,273.5 million of repayments relating to revolving credit facilities including £1,770.0 million Class A and £503.5 million Class B. The remaining amount includes £527.0 million loan repayments and £521.0 million bond repayments.

⁴ Derivative settlement of £20.6 million, a cash inflow, relates to settlement of cross currency swaps. £15.3 million, a cash outflow in prior year, relates to index-linked swaps where accretion is payable periodically.

Bazalgette Tunnel Limited ("BTL") is an independent company, appointed in 2015 to construct the Thames Tideway Tunnel. Included in the cashflow are amounts in relation to the arrangement with BTL and therefore our underlying amounts are disclosed separately as required by some of our financial covenants. Information on how the Group accounts for this arrangement is detailed in the accounting policies on page 46.

Company statement of cash flows

For the year ended 31 March 2022

	Note	2022 £m	2021 £m
Cash generated used in operations	41	313.2	37.4
Net cash generated by operating activities		313.2	37.4
<i>Investing activities:</i>			
New loans issued		-	(82.0)
Interest received		0.5	0.1
Net cash generated by/(used in) investing activities		0.5	(81.9)
<i>Financing activities:</i>			
New loans raised		-	497.2
Repayment of borrowings		(31.5)	(134.9)
Interest paid		(317.7)	(55.2)
Fees paid		(1.2)	(4.8)
Net cash (used in)/generated by financing activities		(350.4)	302.3
Net (decrease)/increase in cash and cash equivalents		(36.7)	257.8
Net cash and cash equivalents at beginning of the year		286.5	28.7
Net cash and cash equivalents at end of the year		249.8	286.5

Accounting policies

The principal accounting policies adopted in the preparation of these consolidated and company financial statements, which have been applied consistently, unless otherwise stated, are set out below.

General information

Kemble Water Finance Limited ("the Company") is a private limited company incorporated and domiciled in the United Kingdom under the Companies Act 2006 whose principal activity is to act as the holding company for the Kemble Water Finance Limited group of companies ("the Group"). The trading address and the address of the registered office of both the Company and the Group is Clearwater Court, Vastern Road, Reading, RG1 8DB.

The Group's principal activity is that of an appointed water and wastewater services provider, including acting as a retailer for household customers, operating in London, the Thames Valley and surrounding area, delivered through its wholly owned subsidiary Thames Water Utilities Limited ("TWUL" or "Thames Water") in accordance with TWUL's licence of appointment.

Statement of compliance with International Financial Reporting Standards ("IFRS")

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into UK law and became UK-adopted International Accounting Standards, with future changes being subject to endorsement by the UK Endorsement Board. The Group transitioned to UK-adopted International Accounting Standards in its consolidated financial statements on 1 April 2021. This change does not constitute a change in accounting policy but rather a change in framework which is required to ground the use of IFRS in company law. However, there is no impact on recognition, measurement or disclosure in the period reported as a result of the change in framework.

These consolidated and Company only financial statements have been prepared under International Financial Reporting Standards ("IFRS") as adopted by the UK Endorsement Board. This change in basis of preparation is required by UK company law for the purposes of financial reporting as a result of the UK's exit from the EU on 31 January 2020 and cessation of the transition period on 31 December 2020.

Basis of preparation

The consolidated and Company only financial statements have been prepared on the going concern basis, under the historical cost convention, as modified by the revaluation of certain financial assets and liabilities at fair value, and the Disclosure and Transparency Rules ("DTR") issued by the Financial Conduct Authority.

Basis of consolidation

The Group financial statements consolidate the financial statements of the Company and entities controlled by the Company (its subsidiaries) and incorporate the results of its share of joint ventures using equity accounting. Associates are accounted for on an equity basis either where the Group's holding exceeds 20% or the Group has the power to exercise significant influence. Control is achieved where the Company has the power to govern the financial and operating policies, generally accompanied by a shareholding of more than one half of the voting rights, of an investee entity so as to obtain benefits from its activities. All intra-group transactions, balances, income and expenses are eliminated on consolidation.

Where necessary, adjustments have been made to the financial statements of subsidiaries to align the accounting policies used under the relevant IFRS standards into line with those used by the Group.

Going concern

The Directors have assessed KWF's ability to continue as a going concern, recognising it is a holding company with no material, direct business operations and is therefore mainly dependent on Thames Water Utilities Limited Group ("TWUL Group") which holds the regulated entity Thames Water Utilities Limited ("TWUL") to generate the funds necessary for Kemble Water Finance ("KWF") and Thames Water (Kemble) Finance ("TW(K)F") to meet their respective financial obligations.

Given the dependency on TWUL Group, the Directors have considered the going concern assessment made by the TWUL Group directors as well as the actions taken by TWUL Group post the balance sheet date of 31 March 2022. The section below, "Summary of TWUL Group going concern assessment" outlines this assessment where the TWUL Group Board has concluded it appropriate to prepare the financial statements for TWUL Group on a going concern basis. Further details of this assessment and the post balance sheet events are contained within the TWUL annual report for 2021/22, copies of which may be obtained from the Company Secretary's Office at at Thames Water Group, Clearwater Court, Vastern Road, Reading, Berkshire, RG1 8DB.

Accounting policies (continued)

Going concern (continued)

Summary of TWUL Group going concern assessment

In assessing the appropriateness of the going concern basis, the Directors have considered the following factors.

On 29 June 2022, the Board approved an updated business plan which forecasts £11.5 billion (2017/18 real terms) of total expenditure over the current 5 year regulatory period. To support Thames Water in the delivery of its business plan, shareholders have provided an Equity Commitment Letter where they have agreed to contribute, or cause to be contributed, an aggregate of £500 million in equity, available to be drawn in full by the

Group in March 2023, alongside an Equity Support Letter which sets out further Shareholder support. Given the equity commitment of £500 million has been approved by shareholders' investment committees, is not subject to any performance-related conditions and can be drawn in March 2023, the Directors believe it reasonable that the £500 million of equity support can be taken into account for the going concern assessment.

The Group's liquidity position and cashflow projections are closely monitored and updated regularly. Mitigating measures are also continually reviewed and actioned where appropriate. The Group has significant liquidity headroom based on financial resources in the form of cash and committed bank facilities. As of 31 March 2022, such liquidity consisted of £426 million of cash and cash equivalents, access to £1.80 billion of revolving credit facilities of which £1.43 billion was undrawn, £100 million undrawn Class B facility and £550 million of undrawn liquidity facilities (the latter of which can only be used in limited circumstances). Furthermore during the pandemic, the Group has continued to efficiently access capital markets. As per the terms of the Whole Business Securitisation, the Group is subject to financial covenants, assessed based on interest cover and gearing ratios. With significant headroom being present under the gearing ratios, the interest cover ratios are a more limiting factor and are mainly affected by operational cashflows.

Given the economic uncertainty associated with various macro factors such as Covid-19, supply chain constraints, cost of living concerns and Brexit, a severe but plausible downside case has been considered where the ability of household customers to pay their bills has been adversely affected. This would result in lower collection rates, higher bad debt charges and lower billable volumes in the non-household sector due to reduced consumption. Furthermore, the downside case assumes higher operational costs associated with various efficiency programmes not being delivered, higher power and chemical prices and adverse weather. The impact on operational cashflows is reduced by mitigants involving active working capital management and the release of contingencies embedded with the Business Plan which have also been taken into account. Under the various scenarios, the business remains compliant with the relevant financial covenants and forecasts sufficient liquidity headroom for a period of at least 12 months from the date of signing of the financial statements.

The Directors have also considered the consequences of a temporary Trigger Event, a feature of the Group's Whole Business Securitisation ("WBS") structure. Consequences include, but are not limited to, a cash lockup and a prohibition from incurring additional debt other than utilisations from the existing bank facilities. The Trigger Event acts as an early warning sign that is structured to provide additional creditor protections. It is designed to maintain the Group's creditworthiness as such, it does not affect the Group's continued access to its significant existing bank facilities nor would it disrupt the Group's ability to trade. The cash lockup preserves the value of the Group which is in the interest of creditors and customers. Whilst prohibited from accessing new funding, the Group has significant bank facilities which the Directors believe are sufficient to fund its programme and meet its obligations for the duration of a temporary Trigger Event over the assessment period.

Based on the above, the Board is satisfied that the Group has adequate resources, for a period of at least 12 months from the date of approval of the financial statements, to continue operations and discharge its obligations as they fall due. For this reason, the Board considers it appropriate to adopt the going concern basis in preparing the financial statements.

The conclusion from the TWUL Group Board helps to underpin the Directors' belief that the Company has the ability to meet its financial obligations over the assessment period.

The Directors have assessed the Company's liquidity position and ability to comply with its financial covenants which differ from that of TWUL Group. The financial covenants for KWF take into account the effects of the aggregate net debt outstanding as well as the operational cashflows and profits from KWF and its subsidiaries a consolidated basis. In addition to the cash balances available, KWF also has in place a committed undrawn working capital facility which can fund at least 18 months of interest payments on the external debt held by KWF and its special purpose financing subsidiary TW(K)F. The Directors have considered projected cashflows and forecast compliance with the financial covenants during the assessment period.

The Directors have also considered the consequences of a temporary dividend lockup and / or Trigger Event at TWUL Group. Under such circumstances, TWUL Group would be prohibited from paying out distributions for the duration of the dividend lockup and / or Trigger Event. Such distributions would typically be used to service the interest payments on the external debt held by KWF and TW(K)F. The Directors believe that the sources of liquidity mentioned above are sufficient to allow KWF and TW(K)F to service the external debt interest for the duration of the cash lockup at TWUL Group.

Taking into consideration the above factors, the Board is satisfied that the Company has adequate resources for a period of at least 12 months from the date of approval of the condensed financial statements to continue operations and discharge the Company's obligations as they fall due. For this reason, the Board considers it is appropriate to adopt the going concern basis in preparing the financial statements.

Accounting policies (continued)

Bazalgette Tunnel Limited (“BTL”) arrangement

Bazalgette Tunnel Limited (“BTL”) is an independent company, appointed in 2015 to construct the Thames Tideway Tunnel. We have recognised revenue, cost and profit on the arrangement with BTL and disclosed our underlying performance separately, as required by some of our financial covenants.

The arrangement with BTL and Ofwat means the Group has included amounts to recover costs of the Thames Tideway Tunnel within its bills to wastewater customers. As cash is collected, these amounts are subsequently paid to BTL, under the ‘pay when paid’ principle.

Accounting standards require the Group to present the amounts billed as revenue in our financial statements, and with an associated cost representing bad debt on amounts billed, this also gives rise to reporting profit which is taxable. This non-appointed revenue, cost and profit are excluded from our key performance indicators, which is consistent with our financial covenants. The revenue, cost and resulting profit on this arrangement is disclosed separately to the Group’s underlying performance in the financial statements. As a result of this arrangement, a prepayment is created and recorded by the Group as BTL will transfer the use of the tunnel to Thames Water Utilities Limited once construction is complete, against which this prepayment will be utilised.

As part of the construction of the Thames Tideway Tunnel, buildings are acquired by the Group and will be recognised within Land and Buildings within Property, Plant and Equipment. These will be disposed of in future financial periods once construction is completed.

Revenue recognition

The core principle of IFRS 15 “Revenue from Contracts with Customers” requires an entity to recognise revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration that it expects to be entitled to in exchange for transferring those goods or services to the customer. The Group has a variety of customers including, household customers (Directly billed or Indirectly billed by other Water Only Companies (“WOCs”)) and non-household customers (retailers and NAVs “New Appointments and Variations”).

Revenue is recognised when, or as, the performance obligations to the customer are satisfied. Consideration received in advance of recognising the associated revenue from the customer is recorded within contract liabilities (deferred income). Bad debt on bills raised in the year considered uncollectable at the time of billing based on historical experience is excluded from revenue, as it does not fall within the IFRS 15 criteria. This is to ensure that revenue is recorded at the amount which the Group expects to receive for providing its services to customers.

The Group considers the performance obligation associated with our core revenue to be the continued provision of water and wastewater services to customers.

Revenue includes an estimate of the amount of mains water and wastewater charges unbilled at the period end, which are recorded within contract assets (accrued income). The usage is estimated using a defined methodology based upon historical data and assumptions. For unmeasured customers, the amount to be billed is dependent upon the rateable value of the property, as assessed by an independent rating officer. The amount billed, typically in advance of delivery, is recorded within contract liabilities (deferred income) and is apportioned to revenue over the period to which the performance obligation is satisfied. When the Group identifies the occupants, the bill is sent out in the customer’s name if known or if not in the name of the occupier. If the Group has not identified an occupant within six months, and the bill remains unpaid, the bill is cancelled and the property is classified as empty.

Where a bill is cancelled and the property is made empty, for measured customers, the revenue cancellation is recognised immediately. Where the property is not empty, the cancelled bill will be replaced with an unbilled accrual. For unmeasured customers, the amount cancelled is recorded within contract liabilities (deferred income) and follows the apportionment stated. Upon rebilling, for measured customers the billed value is recognised immediately and for unmeasured customers the amount is recorded in contract liabilities (deferred income) and follows the apportionment stated in the paragraph above.

Revenue includes amounts that the Group billed to wastewater customers in respect of construction costs for the Thames Tideway Tunnel. This is discussed in the previous BTL arrangement section.

Refer to pages 58 to 59 for significant accounting estimates and judgements concerning revenue recognition.

Other operating income

The Group considers the combination of activities comprising a Service Connection to represent a distinct performance obligation to the customer. The service connections charge levied includes the cost of excavating, connecting and reinstating (if needed) the new supply, including the installation of a stop valve, boundary box and external water meter as well as any associated pipework between the connection and the boundary box. This income is recognised within other operating income at the point in time that the service is complete, as no continuing obligation remains once the connection has been made. Deferred service connections income is recorded within contract liabilities (deferred income). Typically amounts received will be fully recognised within a year following receipt.

Accounting policies (continued)

Other operating income (continued)

Requisitions & Diversions income is recognised over time in other operating income using the input method by estimating complete satisfaction of the performance obligation and applying this to the transaction price in the contract with the customer. The estimated progress is based upon the costs incurred for the performance obligation. Deferred requisitions and diversions income is recorded within contract liabilities (deferred income). These income streams encompass a wide variety of schemes, from those with short durations that would be fully recognised by the end of the year following receipt to large multi-phase developments for which income could be recognised over the course of several years.

Contributions received for infrastructure charges (which meet the extra demands which new connections put on existing water mains, sewers and other network infrastructure) are initially held within contract liabilities (deferred income). The Group considers that the obligation to invest in the network is highly interrelated with the ongoing and future obligation to provide water and wastewater services, particularly to maintain continuous supplies going forward. The investment in the network from the infrastructure charges enables the Group to continue providing value to the customer through water and wastewater services. The associated asset arises from the investment in the network and therefore the Group recognises infrastructure charges in other operating income on a straight-line basis over the life of the associated asset. Notwithstanding the length of time between when the Group performs its obligations and when the customer pays, infrastructure charges are not adjusted for the time value of money given the trivial monetary impact.

Interest income

Interest income is accrued on a time basis by reference to the principal outstanding and the Effective Interest Rate ("EIR") applicable. The EIR is the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is presented within finance income in the consolidated income statement.

Interest expense

Interest expense is accrued on a time basis by reference to the principal outstanding and the Effective Interest Rate ("EIR") applicable. The EIR is the rate that exactly discounts the estimated future cash payments over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest expense is presented within finance expense in the consolidated income statement.

Contract assets

Contract assets are presented in the statement of financial position when the Group's right to consideration is met in advance of billing. The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance. Refer to the "Trade and other receivables (excluding prepayments)" section for more information.

Contract liabilities

Contract liabilities are presented in the statement of financial position where a customer has paid an amount of consideration prior to the Group performing the transfer of the related good or service to the customer. An example would be for an unmeasured customer where the amount billed is dependent upon the rateable value of the property. The amount is billed at the start of the financial year and is apportioned to revenue over the period. In addition, included within contract liabilities is deferred revenue in relation to nil cost assets adopted during the year and receipts in advance from our capital projects, infrastructure charges, diversions and service connections.

Net gains/(losses) on financial instruments

The Group raises debt in a variety of currencies and uses derivative contracts to manage the foreign exchange risk exposure on this debt. The Group also uses derivative contracts to manage interest rate and inflation risk.

Borrowings denominated in foreign currencies at the financial reporting date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the income statement as net losses/gains on financial instruments. The following are also recognised in the income statement as net losses / gains on financial instruments:

- movement in fair values of derivatives, which are not designated as hedging instruments, and
- in case of derivatives which are designated as hedging instruments, amounts recycled from cash flow hedge reserve.

Net gains/(losses) on financial instruments do not include any interest expense or income. Refer to Derivative financial instrument and hedging accounting policy on page 53 for more details.

Taxation

Tax on the profit or loss for the period comprises current and deferred tax. Tax is recognised in the consolidated income statement except to the extent that it relates to items recognised directly within equity, in which case it is recognised within the consolidated statement of other comprehensive income.

Accounting policies (continued)

Taxation (continued)

Current tax

Current tax is the expected tax payable or receivable on the taxable profit or loss for the period, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustments to tax payable in respect of previous periods.

Taxable profit differs from the profit on ordinary activities before tax as reported in the income statement as it excludes items of income or expense that are taxable or deductible in other periods and items that are never taxable or deductible. It also includes the effect of tax allowances.

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, and is accounted for using the balance sheet liability method. Deferred tax is measured on a non-discounted basis using tax rates enacted or substantively enacted at the balance sheet date and that are expected to apply in the period when the deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are recognised only to the extent that it is probable that sufficient future taxable profits will be available against which deductible temporary differences can be utilised.

Deferred tax assets and deferred tax liabilities are offset when there is a legally enforceable right to set off tax assets against tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Uncertain tax positions

Tax rules can be subject to interpretation and a tax provision is recognised where it is considered more likely than not that an amount will be paid to the tax authorities. Management use their experience, and seek professional advice where appropriate, to prudently assess the likelihood of an outflow arising. The amount recognised is the single most likely outcome.

Investments in subsidiary undertakings

Investment in subsidiary undertaking is stated at cost, less any provision for impairment. This impairment would be recognised within the Company Income Statement only. An impairment review is performed on an annual basis.

Goodwill

Goodwill arises on the acquisition of subsidiaries and represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired. Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. For the purpose of impairment testing, the carrying value of goodwill acquired in a business combination is compared to the recoverable amount, which is the higher of the value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense within the income statement and is not subsequently reversed.

Intangible assets (excluding goodwill)

Separately acquired intangible assets, and internally generated intangible assets once commissioned, are stated at cost, less accumulated amortisation and any provision for impairment. Amortisation is charged to the income statement on a straight-line basis over the estimated useful economic life of the intangible asset from the date the intangible asset becomes available for use. The estimated useful economic lives are as follows:

	Years
Software	5-10

Assets in development are not amortised until they are commissioned. Borrowing costs that have been capitalised within purchase of intangible assets are included within "Purchase of intangible assets" within investing activities in the statement of cash flows. All other borrowing costs are included as finance expenses within the consolidated income statement.

Property, plant and equipment

Property, Plant and Equipment ("PP&E") is comprised of network assets (including water mains, sewers, pumped raw water storage reservoirs and sludge pipelines) and non-network assets (including buildings, operational structures and fixtures & fittings). PP&E is stated at cost (or at deemed cost in the case of network assets, being the fair value at the date of transition to IFRS) less accumulated depreciation and provision for impairment.

The Group capitalises the directly attributable costs of procuring and constructing PP&E, which include labour and other internal costs incremental to the business. Subsequent costs are capitalised only when it is probable that future economic benefits associated with the item will flow to the Group and the cost can be measured reliably.

Accounting policies (continued)

Property, plant and equipment (continued)

Within Land and Buildings are assets acquired in relation to the Thames Tideway Tunnel project. These land and buildings were acquired to perform necessary works relating to the construction and integration of the tunnel into our network and will be disposed of in due course once required works have been completed in line with the agreement with Ofwat.

Where a qualifying asset takes a substantial period of time to get ready for its intended use, the borrowing costs directly attributable to the acquisition, construction or production of the asset are added to the cost. Borrowing costs that have been capitalised within purchase of property, plant and equipment are included within "Purchase of property, plant and equipment" within investing activities in the statement of cash flows. All other borrowing costs are included as finance expenses within the consolidated income statement.

Where items of PP&E are transferred to the Group from customers or developers, generally in the form of adopted water mains, self-lay sewers or adopted pumping stations, the fair value of the asset transferred is recognised in the statement of financial position. Fair value is determined based on estimated replacement cost. Where the transfer is in exchange for connection to the network and there is no further obligation for ongoing services, the corresponding credit is recognised immediately within other operating income. Where the transfer is considered to be linked to the provision of ongoing services, the corresponding credit is recorded in contract liabilities (deferred income) and is released to other operating income over the expected useful economic lives of the associated assets.

PP&E is depreciated to its estimated residual value on a straight-line basis over its estimated useful life, with the exception of freehold land which is not depreciated. Assets in the course of construction are not depreciated until they are commissioned. The estimated useful economic lives are as follows:

	Years
Network assets:	
Reservoirs	250
Strategic sewer components	200
Wastewater network assets	150
Water network assets	80-100
Raw water tunnels and aqueducts	80
Non-network assets:	
<i>Land and buildings:</i>	
Buildings	15-60
Operational structures	30-100
<i>Plant and equipment:</i>	
Other operational assets	7-40
Fixtures & fittings	5-7
Vehicles	4-5
Computers	3-5
Fixed and mobile plant	4-60

BTL arrangement

On completion of construction of the Thames Tideway Tunnel, substantially all the risks and rewards of ownership will lie with the Group. The Group will therefore account for the transaction arrangement with BTL post construction in accordance with IFRS 16 'Leases'. The tunnel will be recognised as a right of use asset and depreciated over the life of the contract. On inception of the contract, the tunnel will be recognised at the sum of BTL prepayment and the present value of the future minimum contract payments, with a corresponding liability being recognised as a lease liability. Interest will be recognised in the income statement over the period of the lease.

Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets are reviewed at each financial reporting date to determine whether there is any indication of impairment. If any such indication exists then the recoverable amount of the asset is estimated, which is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit"). Management do not consider there to be any significant judgements relating to the impairment of non-financial assets.

An impairment loss is recognised if the carrying amount of an asset or its cash generating unit exceeds its estimated recoverable amount. Impairment losses are recognised in the income statement, and those recognised in prior periods are assessed at each financial reporting date for any indications that the loss has decreased or no longer exists.

Accounting policies (continued)

Non-derivative financial instruments

Trade and other receivables (excluding prepayments)

Trade receivables are measured at their transaction price on initial recognition and subsequently at amortised cost using the effective interest method. Other receivables such as loans or insurance receivables are recognised at fair value on initial recognition.

Included within other receivables are amounts owed to the Group in respect of insurance claims. Insurance receivables and these other receivables are only recognised when the Group is virtually certain that the amount will be recoverable.

IFRS 9 requires an entity to reduce the gross carrying amount of a financial asset when the entity has 'no reasonable expectations of recovering' a financial asset. Write-offs are recognised as an expense within operating costs and can relate to a financial asset in its entirety or to a portion of it.

Expected credit losses

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables, contract assets and insurance claims receivable where those assets may be subject to significant increase in credit risk for example due to the impact of cost of living increases. The Group's assessment for calculating expected credit losses is explained below. In addition, Management has considered the impact of cost of living increases, and has created a provision to reflect the expected adverse impact on customers' ability to pay their water and wastewater bills, than otherwise would be the case. The provision booked at March 2021 contained an allowance in relation to the expected impact of the economic uncertainty created by Covid-19. This has now been released.

(i) Directly billed

A bad debt model is used to calculate the provision for directly billed customers. This uses performance in the year to determine the level of provision required. The model takes the closing receivables balance and then deducts the amounts that are expected to be collected or cancelled based on actual performance in the year and age of debt. The amount that remains will be uncollectable and therefore needs to be covered by a bad debt provision. Debt that is older than 5 years is fully provided for. The model considers the impact on provisions for billing that is cancelled and not rebilled and also the collectability of any rebilling and a bad debt provision against unbilled debtors; for instance, debts that have not been billed yet but are part of the metered sales accrual. Using the output of the model together with management's judgement of expected performance in the future, a management judgement is formed regarding the level of provision required for future credit losses.

Directly Billed Write Off Policy

The bad debt write off policy has remained unchanged and has been consistently applied in the current year. Debt is only written off after all available economic options for collecting the debt have been exhausted and the debt has been deemed to be uncollectable. This may be because the debt is impossible, impractical, inefficient or uneconomic to collect.

Situations where this may arise and where debt may be written off are as follows:

- Where the customer has absconded without paying and strategies to trace their whereabouts and collect outstanding monies have been fully exhausted;
- Where the customer has died without leaving an estate or has left an insufficient estate on which to levy execution;
- Where the value of the debt makes it uneconomic to pursue – all debts of less than £5 are written off;
- Where the age of the debt exceeds the statute of limitations – all debts of greater than 6 years old are written off, taking into account usual business rules;
- Where county court proceedings and attempts to recover the debt by debt collection agencies (multiple in some cases) have proved unsuccessful including where the customer does not have any assets or has insufficient assets on which to levy execution; and
- Where the customer has been declared bankrupt, is in liquidation or is subject to insolvency proceedings or a debt relief order and no dividend has been or is likely to be received.

For debt to be written off there must be a legitimate charge against the debtor and no reasonable expectation of recovery.

(ii) WOCs

A provision is also made against debts held by Water Only Companies ("WOCs") who bill their customers for sewerage services on behalf of the Group. Since detailed information about the debt held on our behalf by the WOCs is limited, we use an average of two data points when calculating the provisions – WOC Statutory Accounts and TW directly billed ("DB") provision rates - taking a single data point is not appropriate as collection rates, write-off and provisioning policies, differ from company to company. Where provision rates have been provided by the WOCs this has been used as it accurately reflects the provision required to cover future write-offs. In addition, Management has considered the impact of cost of living increases, and has created a provision to reflect the expected adverse impact on customers' ability to pay their water and wastewater bills, than otherwise would be the case. The provision booked at March 2021 contained an allowance in relation to the expected impact of the economic uncertainty created by Covid-19, this has now been released.

We consider current performance and any information available to create the provision we then make management judgements in respect of future credit losses, in accordance with the requirements of IFRS 9.

(iii) BTL

The arrangement with BTL means the Group has included construction costs of the Thames Tideway Tunnel within its bills to wastewater customers. As cash is collected, these amounts are subsequently paid to BTL. This arrangement gives rise to recognising revenue within the Group and associated bad debt. The bad debt methodology is consistent with directly billed customers.

Accounting policies (continued)

Non-derivative financial instruments (continued)

Expected credit losses (continued)

(iv) Non-Household

The Group has assessed the risk of credit losses for non-household customers to be low and therefore no bad debt provision has been made. The Group has assessed specific debts held in respect of non-household customers which are subject to query by those customers, and made a revenue loss provision on those debts within accrued income based on historical collections experience or on latest negotiations related to specific invoice queries.

Intercompany loans receivable

Interest bearing loans issued to other group companies are initially recognised at fair value plus transaction costs that are directly attributable to the acquisition of the financial asset. They are subsequently measured at amortised cost using the effective interest rate method, less any provision for impairment. The amortisation is included within finance income in the income statement and is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate.

For loans repayable on demand, expected credit losses are based on the assumption that repayment of the loan is demanded in full at the reporting date. This is because Paragraph B5.5.38 of IFRS 9 states the maximum period over which expected impairment losses should be measured is the longest contractual period where an entity is exposed to credit risk. The Group has considered the recoverability of the intercompany receivables as part of the Kemble Group's annual impairment assessment of all intercompany balances under IFRS 9. Various scenarios were considered in a multiple factor analysis performed at the reporting date with no expected credit loss on these loans identified. As such there is no concern over the recoverability of intercompany receivables, the Directors do not consider that there is any need to book an impairment provision and expect to materially recover the intercompany amount.

Trade and other payables (excluding other taxation and social security)

Trade and other payables (excluding other taxation and social security) represent liabilities for goods and services provided to the Group prior to the end of the reporting period which are unpaid. These amounts are usually unsecured and are provided with credit terms of payment.

Trade and other payables are recognised in the statement of financial position when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably. These conditions are satisfied when goods and services have been supplied to the Group. Therefore, payables and accruals must be recognised when goods and services have been received.

Trade and other payables include amounts owed to BTL that represent revenue collected and due to BTL for the construction of the Thames Tideway Tunnel, which have not yet been paid at the reporting date.

Cash and cash equivalents

Cash and cash equivalents – cash at bank and in hand are held at amortised cost and include cash on hand and deposits held at call with financial institutions. Cash and cash equivalents – money market funds are held at fair value through profit or loss.

Included within cash and cash equivalents – money market funds are amounts collected in relation to BTL revenue which have not yet been paid across to BTL at the reporting date.

Short-term investments

Short-term investments are held at amortised cost and include term deposits which are not readily convertible into cash.

Interest bearing borrowings including those issued to other group companies

Interest bearing borrowings are financial liabilities recognised initially at fair value less attributable transaction costs and subsequently at amortised cost using the effective interest method.

An exchange or modification of interest-bearing borrowing with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of new financial liability, with any costs or fees incurred are recognised as part of the gain or loss on the extinguishment. In case of exchange or modification of interest-bearing borrowings without substantially different terms, the difference between net present value of existing contractual cash flows and modified contractual cash flows, both discounted at the original effective interest rate, is recognised as a modification gain or loss on the income statement.

Inventories

Inventories are stated at the lower of cost and net realisable value ("NRV").

Prepayments

Prepayments are recorded where the Group has paid for goods or services before delivery of those goods or services. Included within prepayments are amounts paid and payable to BTL which represent a prepayment for the use of the Thames Tideway Tunnel once the tunnel has been constructed and is available for use.

Accounting policies (continued)

Retirement and other employment benefits

Defined benefit schemes

The Group operates two, independently administered, defined benefit pension schemes, both of which are closed to new employees. One of these schemes, Thames Water Pension Scheme ("TWPS"), was closed to future accrual as of 31 March 2021. Actuarial valuations are carried out as determined by the Trustees, at intervals of not more than three years. The rates of contributions payable and the pension cost are determined on the advice of the actuaries, having regard to the results of these valuations.

The difference between the value of defined benefit pension scheme assets and liabilities is recorded within the statement of financial position as a retirement benefit surplus or deficit. A retirement benefit surplus is only recognised if the assessment contained within the accounting standard IFRIC 14 IAS 19 'The Limit of a Defined Benefit Asset, Minimum Funding Requirements and their Interaction' is met, i.e. that the entity has an unconditional right to a refund or to reductions in future contributions on the wind-up of the pension scheme.

Defined benefit pension scheme assets are measured at fair value using the bid price for assets with quoted prices. Defined benefit pension scheme liabilities are measured at the reporting date by an independent actuary using the projected unit credit method and discounted at the current rate of return on high quality bonds of equivalent term and currency to the liability.

Service costs, representing the cost of employee service in the period, and scheme administration expenses are included within operating expenses in the income statement. The net finance cost is calculated by applying the discount rate used for the scheme liabilities to the net (deficit) / surplus.

Changes in the retirement benefit surplus or obligation may arise from:

- differences between the return on scheme assets and interest included in the income statement;
- actuarial gains and losses from experience adjustments; or
- changes in demographic or financial assumptions.

Such changes are classified as re-measurements and are charged or credited to equity and recorded within the statement of other comprehensive income in the period in which they arise.

The Trust Deed for the Thames Water Mirror Image Scheme ("TWMIPS") provides the Group with an unconditional right to a refund of surplus assets assuming the full settlement of plan liabilities in the event of a plan wind-up. Furthermore, in the ordinary course of business the Trustee can only force a wind-up once all benefits have been distributed, at which point any surplus would be taken by the Group. Based on these rights, any net surplus in the scheme is recognised in full. Therefore, the Group considers that under IFRIC 14, it is appropriate to recognise the net surplus in TWMIPS.

Defined contribution schemes

The Group operates a Defined Contribution Stakeholder Pension Scheme ("DCSPS") managed through Aon MasterTrust from October 2020. Prior to that, DCSPS was managed through Standard Life Assurance Limited. From 1 April 2011 the DCSPS is the only scheme to which new employees of the Group are eligible. The assets of the DCSPS are held separately from those of the Group and obligations for contributions to the scheme are recognised as an expense in the income statement in the periods during which they fall due.

The Group also operates two closed defined contribution pension schemes. The Group has no further payment obligations, however defined funds for former employees are held within these schemes.

Long-term incentive plans ("LTIP") and bonus

LTIP

Cash based LTIP awards are accrued in the financial statements for the duration of the award. The accrual is based on the values assessed for the applicable schemes, taking into account the duration of the individual scheme, and by comparing the Group's performance against the assumptions used to award payments. These are recognised as the present value of the benefit obligation. Where Group's performance does not meet the criteria for the LTIP to be awarded, no accruals are recognised.

LTIP 2021/24 is a three-year LTIP scheme with a performance period from 1 April 2021 to 31 March 2024. The targets for the LTIP have been set to deliver critical elements of the Group's stretching business plan. 50% of the targets are focused on the delivery of an overarching "Integrated Performance Assessment" measured using the Return on Regulated Earnings (RORE). This assessment provides a measure of successful delivery for customer, the environment and shareholders since it is impacted by all aspects of our business plan. To provide increased focus on customer and the environment, the LTIP includes additional elements targeting delivery of business plans for customer service, leakage, water quality and pollutions. This management incentive was accrued during the period based on management's assessment of performance against the targets set. The on target pay out for eligible senior management is an amount of up to 100% of their salary with a maximum payment of 200% of salary for delivery of stretch targets.

LTIP 2019/20 is a three-year LTIP scheme with a performance period from 1 April 2019 to 31 March 2022. The targets for the LTIP have been set to deliver critical elements of the Group's stretching business plan and 80% of the targets are focused on delivery of key customer outcomes including the delivery of leakage and environmental targets. This management incentive was accrued during the period based on management's assessment of performance against the targets set. This management incentive was accrued during the period based on management's assessment of performance against the targets set. The on target pay out for eligible senior management is an amount of up to 100% of their salary with a maximum payment of 200% of salary for delivery of stretch targets.

Accounting policies (continued)

Retirement and other employment benefits (continued)

Long-term incentive plans ("LTIP") and bonus (continued)

Bonus

Bonus payments are accrued in the period based on assessments of performance against targets set at the beginning of the financial year. Bonuses are paid in the following financial year, once performance has been measured against targets set and approved by the Remuneration Committee.

Provisions for liabilities and charges

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.

Provisions for insured liabilities arise from insurance claims from third parties received by the Group and are recognised or released by assessing their adequacy using current estimates of future cash flows under insurance contracts. Where we have insurance cover for these claims, we recognise a receivable for the reimbursement value from third party insurance companies net of retentions. The timing for the insurance claims is uncertain and therefore both the liability and receivable have been recognised as non-current.

Provisions are discounted to present value using a pre-tax discount rate that reflects the risks specific to the liability, where the effect is material.

Outcome delivery incentives

The Asset Management Plan ("AMP") is the five-year period covered by a water company's business plan. The current period 1 April 2020 to 31 March 2025 is known as AMP7, and the prior period 1 April 2015 to 31 March 2020 was known as AMP6.

The price determination process is undertaken by Ofwat where they determine the amount of revenues that can be earned from customer bills for delivering an agreed level of service.

Outcome delivery incentives ("ODIs") introduce rewards for providing a service which exceeds the level committed and may incur penalties for delivering a lower level of service. These rewards and penalties are in the form of revenue adjustments or Regulatory Capital Value ("RCV") adjustments. The Group adjusts future tariffs to reflect such amounts in response to the change in amount of revenues that the Group is entitled to earn over the AMP period. The ability to benefit from such increases or suffer from decreases is linked to the provision of future services as well as future performance over the rate setting period and therefore, is not an asset or liability (right or obligation) at the balance sheet date.

The majority of our AMP7 performance commitments (PCs) have financial ODIs and are subject to either an in-period or an end-of-AMP revenue adjustment. For PCs with an in-period adjustment, the eligible outperformance or underperformance payment will be assessed during the annual reconciliation process and applied to the revenue allowance with a two-year lag. For PCs with an end-of-AMP adjustment, the eligible payment will be assessed at the next price review and applied to the revenue allowance for the next price review period.

Derivative financial instruments and hedging

Derivatives are used to manage exposure to movements in interest rates, foreign exchange rates and inflation. Derivatives are measured at fair value at each financial reporting date, using the methodology described in note 20.

Derivative financial instruments not designated as hedging instruments

Initially recognition is at fair value, with transaction costs being taken to the income statement. Gains or losses on re-measurement to fair value are recognised immediately in the income statement.

Derivative financial instruments designated as hedging instruments

There are currently no active hedge accounting relationships.

Cash flow hedges

The effective part of any gain or loss on the derivative financial instrument designated as a cash flow hedge is recognised directly in the cash flow hedge reserve. Any ineffective portion of the hedge is recognised immediately in the income statement as net gains/(losses) on financial instruments. The amounts recognised on cash flow hedge reserve are recycled to income statement as phased release over the relevant hedging period and where the related debt has been issued and has not matured. When a hedging instrument expires or is sold, terminated or exercised, or the Group revokes designation of the hedge relationship but the hedged forecast transaction is still expected to occur, the cumulative gain or loss at that point remains in the cash flow hedge reserve within equity and is recognised in accordance with the above policy. If the hedged transaction is no longer expected to take place, the cumulative unrealised gain or loss recognised in equity is recognised in the income statement immediately as net gains/(losses) on financial instruments.

Accounting policies (continued)

Derivative financial instruments and hedging (continued)

Embedded derivatives

Where a contract includes terms that cause some of its cash flows to vary in a similar way to a derivative financial instrument, that part of the contract is considered to be an embedded derivative. Embedded derivatives are separated from the host contract and measured at fair value with gains and losses taken to the income statement if:

- the risks and characteristics of the embedded derivative are not closely related to those of the host contract; and
- the contract is not carried at fair value with gains and losses reported in the income statement.

In all other cases embedded derivatives are accounted for in line with the accounting policy for the contract as a whole.

Offsetting financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statement of financial position if there is currently and in all circumstances an enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the assets and settle the liabilities simultaneously.

Power prices forward contracts

Contracts are entered into to buy future power for a predetermined price. The power is for the Group's own use and the contract is not settled in cash and as such falls outside the scope of IFRS 9.

Financial guarantees

The Group is part of a Whole Business Securitisation ("WBS") group as described in note 20. Companies in the WBS group raise debt in external debt markets through the issuance of secured bonds and loans. All companies in the WBS group guarantee the principal and interest payments due under the terms of the bonds. Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies within this group, the Group considers these to be insurance arrangements and accounts for them as such. In this respect, the Group treats the guarantee contract as a contingent liability until such a time as it becomes probable that the Group will be required to make a payment under the guarantee and the amount can be reliably measured.

Foreign currency

Transactions in foreign currencies are translated to sterling, the Group's presentational currency and the functional currency of the Company, at the foreign exchange rate ruling at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies at the financial reporting date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the income statement.

Leases

Recognition of leases

As a lessee

The Group's leasing activities consist of rentals payable for office properties and other land and buildings. Other rentals are short term or of low value. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions.

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At commencement or on modification of a contract that contains a lease component, along with one or more other lease or non-lease components, the Group accounts for each lease component separately from the non-lease components. The Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone price and the aggregate stand-alone price of the non-lease components.

Right-of-use asset

Right-of-use assets are recognised at cost comprising the following components:

- the amount of the initial measurement of lease liability;
- lease payments made less lease incentives received before the commencement date;
- initial direct costs; and
- restoration costs.

The right-of-use asset is depreciated over the lease term on a straight-line basis.

Accounting Policies (continued)

Leases (continued)

Lease liability

Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payments that are based on an index or a rate;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

The lease payment is discounted using the incremental borrowing rate "IBR". The IBR is the rate of interest that the Group would have to pay to borrow the funds necessary to obtain the right-of-use asset in a similar economic environment at the date of lease inception.

The lease payment is allocated between the liability and the finance cost. The finance cost is recognised in the income statement within 'finance expenses' so as to produce a constant periodic rate of interest over the remaining balance of the liability for each period.

Lease payments represent rentals payable by the Group for certain office properties. Where the Group has the ability and intent to exit a property lease prior to the term end date and it is reasonably certain that this option will be exercised, we have only included lease payments up to the assumed lease exit date. The rent payable is not contingent in nature, however the Group has the ability to agree changes to the arrangement with the lessor if all parties agree.

The Group is subject to a loan covenant under which lease liabilities are classified as unsecured debt, the level of which cannot exceed a specified ratio of 0.8% as a percentage of RCV. However, leases that would have been identified as operating leases prior to the IFRS 16 transition (1 April 2020) do not contribute towards the specified ratio provided that the aggregate amount of financial indebtedness does not exceed a higher specified ratio of 2%.

Short-term leases and leases of low-value assets

The Group has elected not to recognise right-of-use assets and lease liabilities for lease of low-value assets (£5,000) and short-term leases. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

As a lessor

The Group has one material lease for which it is a lessor, which relates to the acquisition of a long leasehold of an office building, Camelford House. The primary purpose of acquiring the building was to provide access to a construction site as part of the construction of the Thames Tideway Tunnel. It is incidental to our business that the Group is acting as a lessor with income received. The Group recognises lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other operating income'.

Exceptional items

Exceptional items are those charges or credits, and their associated tax effects, that are considered to be unusual by the Directors, either by nature or by scale and that are of material significance that separate disclosure is required for the financial statements to be properly understood by the users of the financial statements.

The determining factor for exceptional items is whether or not the item is considered unusual in nature, although exceptional charges may impact the same asset class or business segment over time. Market conditions that have deteriorated significantly over time will only be captured to the extent observable at the balance sheet date. Examples of items that may be considered exceptional include business restructuring and reorganisation or transformation costs, significant gains or losses on disposal, material impairment charges or reversals and provisions in relation to contractual settlements associated with significant disputes and claims.

Exceptional items recognised in the consolidated and Company only financial statements in the prior year related to transformation expenditure incurred from restructuring the business. These costs significantly changed how the Group operated and therefore are considered to be exceptional in nature and outside the ordinary course of business. The Group had additionally made a pension deficit repair payment of £69.7 million covering the financial periods from 2021/22 to 2024/25. This was treated as an exceptional cash flow in the previous year since this deficit repayment over the remaining AMP period is unusual by scale and of such significance that it would be beneficial to users of the financial statements to be disclosed separately in order to ensure our reporting cash flow movement reflects our ordinary business.

The Directors consider that any individual gain or loss on disposal of greater than £30.0 million would be disclosed as being exceptional by nature of its scale. Other gains or losses on disposal below this level may be considered to be exceptional by reference to specific circumstances. These will be explained in the notes of the accounts on a case-by-case basis where relevant.

Accounting Policies (continued)

New accounting policies and financial reporting changes

The accounting policy below has been adopted this year in the preparation of these financial statements:

IFRIC Agenda Decision for IAS 38 – Software-as-a-Service

In April 2021, the International Financial Reporting Interpretations Committee (IFRIC) released an Agenda Decision that impacts the accounting treatment of Software-as-a-Service (“SaaS”) arrangements under IAS 38, Intangible Assets. Under this decision, the IFRIC concluded that customisation and configuration costs in relation to SaaS arrangements should typically be expensed unless they meet the criteria for recognising a separate asset under IAS 38. The impact of this is that customisation and configuration costs that were previously capitalised in respect of this decision should now be expensed. Whilst this is not a separate legislative instrument, the Agenda Decision is effectively considered mandatory when complying with IFRS.

Consistent with other organisations, the Group has historically capitalised all customisation and configuration costs including those which relate to the SaaS solutions. During the year, an exercise has been undertaken to identify SaaS capitalised projects with a positive net book value (most software assets are amortised over a useful economic life of 5-10 years). The nature and value of customisation and configuration costs within the largest 8 projects (66% coverage) has been analysed through review of purchase order information, documentation held on file and discussions with Digital technical experts.

The outcome of this assessment has been reflected for the financial year ended 31 March 2022. Management recognised a total operating expense adjustment amounting to £13.1m for previously capitalised costs (£6.0 million relating to 2021/22 and £7.1 million related to prior years) within the current year income statement as the impact relating to the previous years was not material.

Future standards and amendments

IBOR reform

The UK Financial Conduct Authority (“FCA”) had concluded that the underlying market that the London Inter-Bank Offered Rate (“LIBOR”) was derived from was no longer used in any significant volume and so the rates submitted by banks to sustain the LIBOR rate were often based (at least in part) on expert judgement rather than actual transactions. As a result, after the end of 2021, GBP LIBOR is no longer supported as a benchmark and GBP LIBOR has transitioned (“IBOR reform”) to the new Sterling benchmark the Sterling Overnight Index Average (“SONIA”).

Although Kemble Water Holdings Group is not regulated by the FCA, the Group is impacted by this industry-wide transition given the LIBOR-linked instruments we have outstanding. These were previously transacted with our counterparties, including banks and other investors, the majority of which are regulated by the FCA and so are required to amend contracts to accommodate the ending of the publication of LIBOR.

Interest Rate Benchmark Reform — Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16) is effective for financial years beginning on or after 1 January 2021 and addresses issues that might affect financial reporting during the reform of an interest rate benchmark, including the effects of changes to contractual cash flows or hedging relationships.

There are key differences between GBP LIBOR and SONIA. GBP LIBOR is a ‘term rate’, which means that it is published for a borrowing period (such as 3 months), and it is ‘forward-looking’, because it is published at the beginning of the borrowing period. SONIA is a ‘backward-looking’ rate; it is based on overnight rates from actual transactions, and it is published at the end of the overnight borrowing period. Furthermore, GBP LIBOR includes a credit spread over the risk-free rate, which SONIA does not explicitly incorporate. To transition existing contracts and agreements that reference GBP LIBOR to SONIA, adjustments for term differences and credit differences need to be applied, to enable the two benchmark rates to be economically equivalent on transition.

The Group established a project to oversee the GBP LIBOR transition plan. This transition project includes changes to systems, processes, risk and valuation models, as well as managing related tax and accounting implications.

The International Accounting Standards Board (“IASB”) has issued amendments to IFRS 9, IAS 39 and IFRS 7 in September 2019 that provide temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by IBOR reform. As at 31 March 2022, the Group had no designated hedge relationships and hedge accounting was not applied.

Refer to the IBOR reform section included in note 20 Financial instruments on page 91 for details of all of the financial instruments that the Group holds at 31 March 2022 with an interest rate linked to GBP LIBOR which have not yet transitioned to SONIA or an alternative interest rate benchmark.

As at 31 March 2022, LIBOR has been transitioned to SONIA on an economically equivalent basis for £4,170.8 million (notional) interest rate swaps, £720.0 million (notional) index-linked swaps, £100.0 million (notional) cross-currency swaps, £1,721.5 million revolving credit facilities, £550.0 million liquidity facilities, £110.0 million working capital facility and £874.3 million floating rate loans. No gain or loss was recognised on transition as the Phase 2 reliefs were met. Other modifications have been considered in respect of the IFRS 9 extinguishment and modification requirements. These did not result in a gain or loss.

Accounting Policies (continued)

Future standards and amendments (continued)

IAS 12 – Income Taxes

Amendments have been proposed by the IASB to clarify how companies account for deferred tax on leases and decommissioning obligations. This is not effective until 2023. We are considering the implications of these amendments.

Alternative performance measures

In the reporting of financial information, the Directors have adopted various Alternative Performance Measures (“APMs”). These measures are not defined by IFRS and therefore may not be directly comparable with other companies’ APMs, including those in the Group’s industry. These APMs are not intended to be a substitute for, or superior to, IFRS measurements. Directors and management use APMs to provide additional useful information on the performance and position of the Group, and to enhance the comparability of information between reporting periods.

Capital expenditure (“capex”)

Management review capex, which is the expenditure to acquire or upgrade tangible and intangible assets such as property, pipes, treatment works and software. The capex measure equates to intangible and tangible fixed asset additions in the financial year including capitalised borrowing costs (see notes 11 and 12 respectively) and capital accruals.

Net debt

Net debt is presented in note 20 on both a statutory and covenant basis. The covenant basis of net debt is the measure used when assessing the Group’s gearing (see below) against the level stipulated in the whole business securitisation covenants. Net debt on a statutory basis consists of borrowings (including lease liabilities recorded under IFRS 16) less cash. Net debt on a covenant basis consists of borrowings less cash, excluding amounts owed to other group companies for which there is no related external debt, accrued interest, unamortised IFRS 9 transition costs, unamortised debt issuance costs and discounts and including certain derivative financial liabilities as explained in note 20.

The Group is subject to a covenant under which lease liabilities are classified as unsecured debt. Refer to note 20 for more information.

Regulatory Capital Value (“RCV”)

The RCV has been developed for regulatory purposes by Ofwat and is one of the critical components for setting our customers’ bills. When assessing the revenues that the Group needs, Ofwat consider the return on capital invested in the business, and the RCV is the capital base used in this assessment. There is no equivalent statutory measure.

Gearing

Gearing is the percentage of the Group’s covenant net debt to RCV and is a key covenant ratio for the Group’s financing arrangements with its lenders. There is no equivalent statutory measure.

Post Maintenance Interest Cover Ratio (“PMICR”)

PMICR measures the amount of underlying cash generated by operating activities of the Group, adjusted for RCV depreciation, relating to the interest paid on the Group’s debt. This ratio is a key covenant set by our lenders, and in modified forms, also used by rating agencies as part of their analysis when determining credit ratings. There is no equivalent statutory measure.

Credit rating

The Group must maintain an investment grade credit rating in accordance with our licence of appointment as a water and wastewater service provider. An investment grade rating equates to BBB- or higher from Standard & Poor’s and Baa3 or higher from Moody’s. The assessment by these two agencies provides an independent view of the Group’s performance and future prospects. There is no equivalent statutory measure.

Underlying

Underlying represents the financial performance of the Group excluding the arrangement with Bazalgette Tunnel Limited (“BTL”). The underlying performance of the Group has been included within our financial statements and associated notes separate to our performance from the BTL arrangement.

As required by some of our financial covenants, we disclose our underlying performance separately.

Bazalgette Tunnel Limited (“BTL”)

BTL represents the financial performance of the Group from the arrangement with BTL. The performance from the BTL arrangement is included within our financial statements and associated notes separate to our underlying performance. Refer to page 46 for more information on the BTL arrangement.

Significant accounting judgements and key sources of estimation uncertainty

The preparation of annual financial statements requires the Group to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expense. Actual results may differ from these estimates. The significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty for the year ended 31 March 2022 are contained in the sections below:

Revenue recognition

Accounting judgement – revenue recognition

Water and wastewater services

The Group bills customers in accordance with its entitlement to receive revenue in line with the limits established by the periodic regulatory review processes. Revenue is recognised when performance obligations are met and when collection of the resulting receivable is probable. Determination of the probability of collection and hence the fair value of revenue recognised during the year is judgemental. Management considers historical trends in determining an adjustment to revenue to reflect instances where collection is not probable at the point of delivery. This has resulted in a decrease in underlying revenue for the current year of £57.1 million (2021: £49.9 million), with a corresponding decrease in receivables as shown in note 16.

Connections, requisitions and diversions

Management considers these types of income to be within the scope of IFRS 15, since a contract (as defined in the standard) exists with the developer or other third party.

The performance obligation is to install/extend the network to a property development (or to divert the network). This is a service since the control of the assets concerned is not transferred to the developer. In the case of connections, revenue is recognised at the point in time of completion. For diversions and requisitions, revenue is recognised over the period of service. The amount recognised is the transaction price multiplied by the percentage of completion, since an asset is created with no alternative use and the Group will have a present right to payment for work performed to date.

The charges are standalone and are not reflective of the ongoing obligation to supply the occupants of the newly connected properties. Supply to the occupants is charged on a standalone basis. This supports the decision not to defer connections/requisitions charges beyond completion of the service to the developer.

Infrastructure charges

Management consider that the obligation to invest in the network is highly interrelated with the ongoing and future obligation to provide water and wastewater services.

This right to charge comes from our licence of appointment as a water and wastewater services provider. The income earned from the infrastructure charges enables us to invest in the network, to continue to fulfil our obligation to provide water and wastewater services to our customers. As a result of this obligation and long term investment in our network, we deem that the income earned from infrastructure charges should be recognised over time rather than upfront.

Accounting judgement and estimation – provision for expected credit losses

The directly billed model uses historical performance to determine the collectability of the debtors in the future. The level of uncollectable debt is determined based on performance in the year with the assumption that performance will repeat in future years. The model takes the closing household debtors and then deducts the amount that will be collected or cancelled based on historical performance. The amount that remains will be uncollectable and will form bad debt provision. Using the 2021/22 performance ensures the most up to date information is used in determining the level of provision required. An adjustment was made in the model to remove any performance that will not repeat in the future. Last year the judgement focused on the impact of Covid-19 and the focus in the current year has been on the rising cost of living crisis.

Management has considered the future impact of increases in the cost of living on customers' ability to pay their water and wastewater bills and has increased the provision by £19.4 million across directly billed customers and WOCs. No adjustment has been made for non-household customers as management have assessed future cash flows and the risk of non-payment was not considered to be material. A similar assessment on external factors was performed in the prior year, and the provision increased by £9.0 million primarily as a result of the impact expected from Covid-19, this proportion of the provision has now been released during the current year given the easing of restrictions. The accounting treatment of revenue is unchanged by Covid-19 since it has not impacted how performance obligations are measured.

The Directly Billed customers accounting judgement was based on economic modelling through past observations and forecasted macroeconomic impacts. The results of the review indicate a significant decrease expected in the value of cash collection receipts during 2022 primarily driven by inflationary and other price increases for consumers, the model calculated that on average customers will have 12.1% less disposable income as a result of increases in cost of living. A provision of £14.7 million has therefore been booked.

For WOCs the accounting judgement was made in line with the Directly Billed bad debt provision. Assuming a decrease in forecasted cash collections, a provision of £4.7 million has been booked.

Significant accounting judgements and key sources of estimation uncertainty (continued)

Revenue recognition (continued)

Accounting judgement and estimation – provision for expected credit losses (continued)

The actual level of receivables collected may differ from the estimated level of recovery which could affect operating results positively or negatively. The bad debt provision at 31 March 2022 was £150.5 million (2021: £146.3 million). The increase was due to an increase in both the WOCs (discussed above) and the Cancel Rebill Provisions. This is offset by a reduction in the Directly Billed customers provision due to an improvement in prior year debt collection rates following successful execution of our debt transformation programme.

We have performed a sensitivity analysis on the main components of the directly billed and WOC bad debt models. The main component of the bad debt model for the directly billed customers is based on cash collection rates; for the WOCs it is an average of the information from their statutory accounts in relation to the level of bad debt provision held for billed and unbilled debtors and the provision rate applied to Directly billed customers. The sensitivity analysis is summarised below:

Directly Billed

Scenario	£ m	Outcome
Current year cash collection rates increase by 6% for 9 out of 12 months	(11.2)	Reduction in charge
Current year cash collection rates reduce by 6% for 9 out of 12 months	11.2	Increase in charge

WOCs

Scenario	£ m	Outcome
Reduction in WOC provision rates by 6% for 9 out of 12 months	(4.5)	Reduction in charge
Increase in WOC provision rates by 6% for 9 out of 12 months	4.5	Increase in charge

Non-Household customers

Queries relating to de-registration of properties are provided for in full. We performed sensitivity analysis on the revenue loss provision based on the % of payments made on all remaining queries from the non-household market, held at year end. Management have assessed future cash flows and the risk of non-payment was not considered to be material.

Scenario	£m	Outcome
Increase in payment % by 10%	0.1	Increase in charge
Decrease in payment % by 10%	(0.1)	Reduction in charge

Property, plant and equipment and intangible assets

Accounting judgement – capitalisation of costs

The Group's activities involve significant investment in construction and engineering projects and assessing the classification of these costs between capital expenditure and operating expenditure requires management to make judgements. The Group capitalises expenditure relating to water and wastewater infrastructure where such expenditure enhances assets or increases the capacity of the network. Maintenance expenditure is taken to the income statement in the period in which it is incurred. Differentiating between enhancement and maintenance works is subjective, particularly in the instances where a single project may include a combination of both types of activities. Property, plant and equipment additions for the year ended 31 March 2022 were £1,271.7 million (2021: £1,050.2 million). Intangibles additions for the year ended 31 March 2022 were £72.3 million (2021: £54.8 million). Both figures include own works capitalised and capitalised borrowing costs.

Own works capitalised for the year ended 31 March 2022 of £226.7 million (2021: £219.8 million) includes employee time and other expenses incurred by central functions on capital programmes and consequently management judgement is applied concerning whether those costs represent costs related to capital programs, following which management then apply a management estimate by calculating the capitalisation rate used. In addition, management capitalises borrowing costs incurred for significant projects that meet certain criteria and judgement is required to identify which projects qualify for this. The capitalised borrowing costs for both property, plant and equipment and intangible assets for the year ended 31 March 2022, net of commissioning, were £115.3 million (2021: £69.7 million).

Significant accounting judgements and key sources of estimation uncertainty (continued)

Property, plant and equipment and intangible assets (continued)

Accounting estimate – depreciation and amortisation

Calculation of the depreciation and amortisation charges requires management to make estimates regarding the useful economic lives (“UELS”) of the assets. These estimates are based on the Group’s experience of similar assets and engineering data. Where management identifies that actual UELs materially differ from the estimate used to calculate the charge, that charge will be adjusted in the period that the difference occurred and future periods.

An assessment of the impact of climate change on accounting estimates was performed. This included assessment of the delivery plan to reach net zero carbon by 2030. Initiatives include use of electric vehicles (and related infrastructure), producing renewable energy (biomethane) from wastewater for injection into the grid and use in powering our assets, generation of solar power and improved energy efficiency in operational processes. Procurement and construction of these investments will happen in future reporting periods and will replace assets which have reached the end of their useful lives. No impairment charges or changes in UELs were identified.

The total depreciation charge for the year ended 31 March 2022 was £623.7 million (2021: £559.3 million) and the total amortisation charge for the year was £55.6 million (2021: £51.9 million). As the Group makes significant investment in PP&E and intangible assets, the differences between the estimated and actual UELs could increase or decrease the charge to the income statement. Sensitivity analysis has been performed on the useful lives, which can be summarised below:

Scenario	£m	Outcome for the year ended 31 March 2022
5 year increase in average remaining useful life	(83.6)	Decrease in total depreciation and amortisation charge in the year
5 year decrease in average remaining useful life	111.4	Increase in total depreciation and amortisation charge in the year

Provisions for other liabilities and charges

Accounting judgement – recognition of environmental and legal provisions

A provision is recognised when it is probable that the Group has an obligation for which a reliable estimate can be made of the amount of the obligation. The Group is subject to commercial and legal claims that are related to the day-to-day operation of its business. These include contractual, employment and environmental matters which are defended and managed in the ordinary course of business. Assessing the outcome of uncertain commercial and legal cases requires judgement to be made regarding the extent to which any claim against the Group is likely to be successful. On a case-by-case basis, management evaluates the likelihood of adverse verdicts or outcomes to these matters and makes a judgement about whether or not a provision should be recognised.

Environmental and legal provisions, which are detailed in note 22, total £53.6 million as at the year ended 31 March 2022 (2021: £22.9 million).

Accounting estimate – valuation of provisions

Assessing the financial outcome of uncertain commercial and legal cases requires estimates to be made regarding the amount by which the Group is liable. These estimates are made after considering available information including notifications, settlements, estimates performed by independent parties and legal counsel, available facts, identification of other potentially responsible entities and their ability to contribute, and prior experience. The amount provided may change in the future as additional information becomes available as a result of new developments. In such circumstances the provision will be adjusted in the future period the new information becomes available.

Provisions for liabilities and charges as at 31 March 2022 totalled £185.0 million (2021: £143.7 million). There is a risk that the final outcome of commercial and legal cases could be materially different to amounts provided or disclosed as a contingent liability.

Investment in subsidiaries and goodwill

Accounting estimation – impairment of investments in subsidiaries and goodwill

Determining whether the Group’s investments in subsidiaries or the carrying value of goodwill have been impaired requires estimations of the investment or cash generating unit’s net realisable value. An enterprise valuation is derived through the application of an observable market multiplier uplift to the underlying entities’ Regulatory Capital Value (“RCV”). The recoverable amount is thus most sensitive to the uplift multiplier used in the valuation model.

Significant accounting judgements and key sources of estimation uncertainty (continued)

Retirement benefit obligations

Accounting estimate – actuarial assumptions

The Group operates two defined benefit pension schemes for which full actuarial valuations are carried out as determined by the Trustees at intervals of not more than three years. In June 2019, the latest triennial valuations of these two defined benefit pension schemes as at 31 March 2019, were signed off by the actuary appointed by the scheme trustees, David Gardiner of Aon. The pension liability and net cost recognised under IAS 19 *Employee Benefits* are assessed using the advice of an actuary appointed by the Group, based on the latest actuarial valuation and assumptions determined by the scheme actuary. These assumptions are based on information supplied to the Group actuary, supplemented by discussions between the Group actuary and management and are used to estimate the present value of defined benefit obligations.

The actuarial assumptions used in determining the pension obligations and net costs recognised affect the profit before tax figure in the income statement and the net asset figure in the statement of financial position and together represent a key source of estimation uncertainty. These assumptions include:

- the discount rate;
- pay growth;
- mortality; and
- inflation.

The actual rates may materially differ from the assumptions due to changes in economic conditions and differences between the life expectancy of the members of the pension schemes and the wider UK population. These could have a positive or negative impact on the financial statements. The total net retirement benefit obligation for the two schemes as at 31 March 2022 was £245.3 million (2021: £219.2 million), which includes a pension deficit of £257.3 million (2021: £277.1 million) for the TWPS scheme, offset by a pension surplus of £12.0 million (2021: £57.9 million) for the TWMIPS scheme. Refer to note 24 for more information on the key assumptions and sensitivities of the pension schemes.

Derivative financial assets and liabilities

Accounting estimate – valuation of derivatives

The Group holds derivative financial instruments that fall into the following categories:

- index-linked swaps;
- cross currency swaps; and
- interest rate swaps.

The fair value of financial assets and liabilities represents the price that would be received to sell an asset or paid to transfer a liability. The techniques for determining the fair value of financial instruments are classified under the hierarchy defined in IFRS 13 *Fair Value Measurement* which categorises inputs to valuation techniques into levels 1-3 based on the degree to which the fair value is observable.

Level 1: Quoted prices in active markets for identical assets or liabilities that can be accessed

Level 2: Significant inputs other than within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Inputs for the assets or liabilities that are not based on observable market data and require management assumptions or inputs from unobservable markets.

Unless otherwise stated, all of the Group's inputs to valuation techniques are level 2 – the fair value is determined from inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. The fair value of derivative financial instruments, including interest rate swaps, cross currency swaps and index-linked swaps are measured using discounted cash flows of all of the transactions within each netting set. The future cash flows are estimated based on observable forward interest rates and inflation rates and future fair values are estimated under a wide range of market scenarios and discounted at a rate that reflects the credit risk of the Group and counterparties. In cases where unobservable inputs are used and such use does not significantly impact the result, the relevant derivative instruments are classified as level 2. The net total of derivative financial assets and liabilities as at 31 March 2022 was a liability of £2,149.6 million (2021 a liability of: £1,306.5 million). Refer to note 20 on page 81 for more information on the key assumptions and sensitivities of the financial instruments.

The restructure of a derivative measured at fair value may result in a change to the observed fair value on the restructure date. Changes in the fair value may be attributable to both observable and unobservable factors. IFRS 9 does not permit the recognition of a restructure date fair value change in the income statement unless it relates to factors that are fully observable in the market. In cases where, due to unobservable factors, it is not possible to reliably identify the actual fair value movement, the whole of the observed fair value movement is capitalised and recognised in the income statement over the maturity period of the relevant restructured derivative. During 2019/20, three index-linked swaps were restructured. At the restructuring date the fair value of these instruments, as indicated by their fair value immediately prior to the restructuring, could not be supported by observable inputs alone. In management's view the reduction in value of £38.0 million at the restructuring date is supported by unobservable factors including the counterparty's credit, capital, funding and trading charges. Therefore, such movement was deferred on the balance sheet in compliance with IFRS 9 and will be recognised in the income statement on a straight-line basis over the life of the underlying derivative instrument. As at 31 March 2022, £33.3 million (2021: £35.3 million) remained capitalised and £2.0 million had been recognised in the income statement (2021: £2.0 million). See note 20 to the consolidated financial statements "Financial Instruments" for more information.

Significant accounting judgements and key sources of estimation uncertainty (continued)

Judgement that relates to Bazalgette Tunnel Limited (“BTL”)

Accounting judgement – principal vs. agent

BTL is the independent licenced utility company appointed by Thames Water to construct the Thames Tideway Tunnel. The appointment was subsequently approved by Ofwat in August 2015. Under the terms of BTL’s licence, BTL will earn and collect revenues by charging the Group for its services. The Group will subsequently charge these amounts to its wastewater customers (based on modifications to the Group’s licence). Judgement has been exercised in assessing whether the Group is acting as principal or agent in its relationship with BTL.

Under IFRS 15 an entity must determine whether the nature of its promise is a performance obligation to deliver a good or service itself, or to arrange for them to be provided by another party. The Group is deemed to have primary responsibility for providing the ‘end to end’ services relating to the disposal of waste from its wastewater customers from collection, transportation (through the existing infrastructure and the Thames Tideway Tunnel) to the processing in the Group’s sewage treatment plants. The Group continues to charge its wastewater customers for the end-to-end waste management service and the BTL element will not be separately reflected in customer bills.

Additionally, the Group, as the sole future user of the Tunnel, will remain exposed to the risks and rewards associated with the service of the overall sewerage system (which includes the Tunnel). These risks include reputational risks. Management therefore consider the Group is operating as principal in the relationship with BTL.

Notes to the Group financial statements

1. Revenue

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Gross revenue	2,149.2	84.9	2,234.1	2,082.6	74.1	2,156.7
Charge for bad and doubtful debts	(57.1)	-	(57.1)	(49.6)	(0.3)	(49.9)
Net revenue	2,092.1	84.9	2,177.0	2,033.0	73.8	2,106.8

All revenue is derived from activities based in the United Kingdom.

Bazalgette Tunnel Limited ("BTL") is responsible for the construction of the Thames Tideway Tunnel. The Group has included costs of the Thames Tideway Tunnel within its bills to wastewater customers. As cash is collected it is paid over to BTL under the 'pay when paid' principle. The revenue on this arrangement has been disclosed separately to the Group's underlying performance in the table above, which is consistent with our financial covenants. The primary reason for the increase in BTL revenue is driven by the phasing of construction works.

Contract assets and liabilities

The Group has recognised the following revenue-related contract assets and liabilities:

	2022 £m	2021 £m
Contract assets		
<i>Current</i>		
Accrued revenue for services provided to metered customers	183.8	176.7
Accrued income for other activities ¹	76.4	68.6
Total current contract assets	260.2	245.3
Contract liabilities		
<i>Non-current</i>		
Deferred revenue from infrastructure charges	529.2	517.3
Deferred revenue from other activities ²	302.6	240.0
Total non-current contract liabilities	831.8	757.3
<i>Current</i>		
Advance payments received from unmeasured customers	73.9	75.4
Deferred revenue from infrastructure charges	5.5	5.3
Deferred revenue from other activities ²	47.7	43.3
Total current contract liabilities	127.1	124.0
Total contract liabilities	958.9	881.3

¹ Other activities includes accrued income from capital projects and the BTL arrangement (discussed on page 46).

² Other activities includes deferred revenue for nil cost assets received during the year and receipts in advance from our capital projects.

Revenue recognised in relation to contract liabilities

The following table shows how much revenue recognised in the current reporting period relates to brought forward contract liabilities and how much relates to performance obligations that were satisfied in a prior period.

	2022 £m	2021 £m
<i>Revenue recognised that was included in the contract liability balance at the beginning of the period:</i>		
Advance payments received	75.4	78.2
Deferred revenue from infrastructure charges	5.3	5.2
Deferred revenue from other activities	43.3	40.6
Total	124.0	124.0

Notes to the Group financial statements (continued)

1. Revenue (continued)

Transaction price allocated to wholly or partly unsatisfied contracts

The following table shows how much revenue is expected to be recognised in future reporting periods in respect of ongoing contracts which are partially or fully unsatisfied as at the reporting date.

	2022 £m	2021 £m
<i>Aggregate amount of the transaction price allocated to contracts that are partially or fully unsatisfied at the reporting date:</i>		
Service connections	8.9	6.0
Requisitions and diversions	165.4	206.6
Infrastructure charges	534.6	522.8
Other	5.2	4.3
Total	714.1	739.7

The Group considers the combination of activities comprising a Service Connection to represent a distinct performance obligation to the customer. This income is recognised within other operating income at the point in time that the service is complete, as no continuing obligation remains once the connection has been made. Typically amounts received in respect of service connections will be fully recognised within a year following receipt.

The Group considers the performance commitment associated with Requisitions and Diversions to be the delivery of the associated asset and accordingly recognises this income over time. Requisitions & Diversions encompass a wide variety of schemes from those with short durations that would be fully recognised in the year following receipt to large multi-phase developments for which income could be recognised over the course of several years.

For infrastructure charges the Group considers its performance commitment to align with its obligation to incur the expense to which the income relates, being the depreciation charge of the associated network reinforcement assets. Accordingly, the total amounts disclosed in the table above represent the total un-amortised amount which will be recognised as income as the assets continue to depreciate.

For water and wastewater services, the Group has a right to consideration from customers to an amount that corresponds directly with the value to the customer of the entity's performance completed to date, being the provision of such services. As such revenue is recognised to the amount the Group has a right to invoice. Therefore, as allowed by the practical expedient set out in IFRS 15, these revenues are not included in the table above.

Notes to the Group financial statements (continued)

2. Operating expenses

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Wages and salaries	344.0	-	344.0	302.9	-	302.9
Social security costs	35.1	-	35.1	33.3	-	33.3
Pension costs – defined benefit schemes	4.0	-	4.0	24.4	-	24.4
Pension costs – defined contribution schemes	27.1	-	27.1	15.2	-	15.2
Apprenticeship Levy	1.6	-	1.6	1.5	-	1.5
Total employee costs	411.8	-	411.8	377.3	-	377.3
Power	175.7	-	175.7	132.0	-	132.0
Raw materials and consumables	54.6	-	54.6	53.0	-	53.0
Rates ¹	87.8	-	87.8	121.5	-	121.5
Research and development expenditure	11.7	-	11.7	11.2	-	11.2
Insurance	50.8	-	50.8	40.2	-	40.2
Legal and professional fees	21.8	-	21.8	41.8	-	41.8
Other operating costs ²	552.7	-	552.7	513.3	-	513.3
Impairment of property, plant and equipment	10.0	-	10.0	-	-	-
Own work capitalised	(226.7)	-	(226.7)	(219.8)	-	(219.8)
Net operating expenses before depreciation and amortisation	1,150.2	-	1,150.2	1,070.5	-	1,070.5
Depreciation of property, plant and equipment	645.8	-	645.8	580.8	-	580.8
Depreciation of right-of use assets	5.7	-	5.7	8.0	-	8.0
Amortisation of intangible assets	55.6	-	55.6	52.0	-	52.0
Net operating expenses excluding exceptional items	1,857.3	-	1,857.3	1,711.3	-	1,711.3
Exceptional costs ³	-	-	-	-	-	-
Reorganisation - severance	-	-	-	0.1	-	0.1
Associated programme management costs	-	-	-	16.2	-	16.2
Net operating expenses	1,857.3	-	1,857.3	1,727.6	-	1,727.6
Impairment losses on financial and contract assets	10.1	0.1	10.2	36.5	0.2	36.7
Total operating expenses	1,867.4	0.1	1,867.5	1,764.1	0.2	1,764.3

¹ Rates expense in the current period includes £24.2 million of rebates relating to reassessment of the business rates expense in the period 2017-2021 (2021: £nil).

² Other operating costs primarily relate to costs for contracted services and repairs and maintenance of assets, including associated labour costs, which do not qualify as capital expenditure under IAS 16: *Property, plant and equipment*.

³ Exceptional costs of £16.3 million in prior year related to transformation expenditure incurred as a result of the significant restructuring of the business. These costs were considered to be exceptional in nature with significant expenditure incurred that is not in the ordinary course of business. The restructure of the business involved significant changes in the way that the Group operates and therefore this transformation expenditure was deemed exceptional by nature. The tax impact of exceptional items was an increase in the tax credit in the income statement of £3.1 million) applying the 19% corporation tax rate.

Notes to the Group financial statements (continued)

2. Operating expenses (continued)

Auditors remuneration

Amounts payable to the Group's auditors are shown below in respect of the following services to the Group:

	2022 £'000	2021 £'000
<i>Fees payable to the Group's auditors:</i>		
Fees payable for the audit of the Company's financial statements	35.0	40.0
Fees payable for the audit of the financial statements of subsidiaries pursuant to legislation	1,652.3	1,470.8
<i>Fees payable to the Group's auditors for other services:</i>		
Audit related assurance services	722.7	765.5
Other	124.2	224.5
Total aggregate remuneration	2,534.2	2,500.8

Fees payable for the audit of the Group's financial statements in the current financial year exclude £12,000 (2021: £3,000) for out of pocket expenses incurred for delivery of the audit.

Other assurance services include certain agreed upon procedures performed by PricewaterhouseCoopers LLP in connection with the Group's regulatory reporting requirements for Ofwat.

3. Employees and Directors

Employees

All Group employees are based in the United Kingdom. The average number of persons employed by the Group during the year (including Executive Directors), analysed by category, was as follows:

	2022 Number	2021 Number
<i>Employed by Thames Water Utilities Limited:</i>		
Operations	3,638	3,420
Retail	1,534	1,452
Support services	1,307	1,139
Digital, strategy and transformation	395	379
Delivery office	208	135
	7,082	6,525
<i>Employed by other group companies:</i>		
Property services	4	4
Total	7,086	6,529

The Company has no employees (2021: none).

Directors

During the year, the Company had fourteen directors (2021: sixteen) who are all Non-Executive Directors of the Group and receive emoluments in respect of their services as Directors of Kemble Water Holdings Limited, the ultimate parent company. All of these costs are borne by the Company's subsidiary, Thames Water Limited. No other remuneration, pension and pension allowances, or other benefits are paid to the directors of the Company.

The Directors' emoluments were as follows:

	2022 £'000	2021 £'000
Director's fees in respect of services to the Company	15.0	-
Director's fees in respect of services to the Company's ultimate parent	502.5	588.8
Director's fees in respect of services to the Company's subsidiaries	52.5	60.0
Total	570.0	648.8

Highest paid Director

Total emoluments of the highest paid Director in respect of services to the Company's ultimate parent during the year were £60,000 (2021: £60,000).

Notes to the Group financial statements (continued)

4. Other operating income

The Group has recognised the following amounts relating to other operating income in the income statement since they are separate to our ongoing obligation to provide water and wastewater services to customers:

	2022 £m	2021 £m
Power income ¹	15.4	10.9
Requisitions and diversions charges	24.3	27.0
Service connection charges	18.4	18.2
Amortisation of deferred income recognised on adoption of assets at nil cost	4.1	3.7
Release from deferred income – infrastructure charges	5.3	5.3
Gain on sale of PPE	1.4	8.3
Rental income ²	9.6	31.7
Other income ³	18.3	17.1
Total	96.8	122.2

¹ Power income comprises income from the sale of internally generated electricity.

² In the prior year we recognised £27.7 million of rental income relating to previous years which was previously held on the Balance Sheet. The rental income relates to a property purchased for the delivery of the Thames Tideway Tunnel. This building was acquired to perform necessary works relating to the construction and integration of the tunnel into our network and will be disposed of in due course once required works have been completed.

³ Other income includes £4.2 million (2021: £14.6 million) relating to excess payments received from customers in the past and recognised during the current year. See note 2 for further details.

5. Finance income

During the year ended 31 March 2022, the Group recognised finance income of £121.0 million (2021: £174.7 million) relating mainly to interest income on bank deposits, interest income on swaps and other finance income on swaps.

	2022 £m	2021 £m
Interest income on bank deposits	0.7	1.3
Interest income on swaps	108.7	171.8
Other finance income on swaps ¹	11.2	0.9
External trading interest income	0.4	0.7
Total	121.0	174.7

¹ £11.2 million other finance income on swaps includes fees received on the novation or restructure of index-linked swaps.

6. Finance expense

The Group also recognised finance expenses of £1,272.3 million (2021: £1,065.0 million) relating mainly to interest and accretion on loans and other borrowings, interest on intercompany borrowings, leases and defined benefit pension obligations.

	2022 £m	2021 £m
<i>Interest in relation to bank and other loans:</i>		
Interest expense	(460.8)	(474.0)
RPI accretion on loans	(229.6)	(50.2)
<i>Interest in relation to intercompany borrowings:</i>		
Interest expense	(696.5)	(633.2)
<i>Interest in relation to leases:</i>		
Leases	(3.2)	(3.4)
<i>Interest in relation to defined benefit obligation:</i>		
Net interest expense on defined benefit obligation	(4.8)	(2.1)
<i>Fees:</i>		
Other finance fees	(3.1)	(1.8)
Gross finance expense	(1,398.0)	(1,164.7)
Amortisation	10.4	30.0
Capitalised borrowing costs	115.3	69.7
Total finance expense	(1,272.3)	(1,065.0)

Notes to the Group financial statements (continued)

7. Net losses on financial instruments

The reconciliation to net losses on financial instruments has been provided below:

	2022 £m	2021 £m
Net exchange (losses)/gains on foreign currency borrowings	(42.3)	145.7
Net loss arising on swaps where hedge accounting is not applied ¹	(822.1)	(630.4)
Loss on cash flow hedge transferred from equity ²	(31.1)	(37.5)
Loss on part repayment of debt ³	-	(2.7)
Total	(895.5)	(524.9)

¹ In the current period the net losses arising on swaps where hedge accounting is not applied primarily reflects higher RPI expectations and an appreciation of GBP against EUR and JPY, partially offset by depreciation of GBP against USD and CAD. The amount includes the fair value of £317.7 million (2021: £52.2 million) accreted on index linked swaps during the year.

² Refer to Note 20 Financial Instruments on pages 89 and 90 for more information on the loss on cash flow hedge transferred from equity.

³ In November 2020, the Group repurchased £59.9 million debt (out of the £175.0 million external debt due 2022) at a £2.7 million premium, with the tender price taking into account the above market interest rate on the bond and its trading price prior to the announcement of the tender. The £2.7 million premium was recognised as a loss on part settlement of debt.

8. Taxation on loss/(profit) on ordinary activities

Tax charge/(credit) in the income statement

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Current tax:						
Current year amounts (receivable)/payable in respect of group relief	(148.3)	16.1	(132.2)	(141.1)	14.0	(127.1)
Overseas tax payable	-	-	-	0.5	-	0.5
Adjustments in respect of prior periods	11.9	-	11.9	(1.1)	-	(1.1)
	(136.4)	16.1	(120.3)	(141.7)	14.0	(127.7)
Deferred tax:						
Origination and reversal of timing differences	(169.7)	-	(169.7)	(52.1)	-	(52.1)
Effect of corporation tax rate change	297.0	-	297.0	-	-	-
Adjustments in respect of prior periods	1.8	-	1.8	1.0	-	1.0
	129.1	-	129.1	(51.1)	-	(51.1)
Tax charge/(credit) on (loss)/profit on ordinary activities	(7.3)	16.1	8.8	(192.8)	14.0	(178.8)

Notes to the Group financial statements (continued)

8. Taxation on loss/(profit) on ordinary activities (continued)

Tax charge/(credit) in the income statement (continued)

The total tax charge for the year ended 31 March 2022 is higher (2021: lower credit) than the standard rate of corporation tax in the UK. The differences are explained below:

	2022			Effective tax rate %	2021			Effective tax rate %
	Underlying £m	BTL £m	Total £m		Underlying £m	BTL £m	Total £m	
(Loss)/profit on ordinary activities before taxation	(1,725.3)	84.8	(1,640.5)		(1,024.1)	73.6	(950.5)	
Current tax at 19% (2021: 19%)	(327.8)	16.1	(311.7)	19.0%	(194.6)	14.0	(180.6)	19.0%
Effects of:								
<i>Recurring items:</i>								
Depreciation on assets that do not qualify for tax relief	3.9	-	3.9		4.4	-	4.4	
Impact of "super-deduction" allowance on capital expenditure ¹	(2.3)	-	(2.3)		-	-	-	
Disallowable expenditure ²	8.5	-	8.5		2.8	-	2.8	
Interest payable not allowable for tax ³	9.6	-	9.6		-	-	-	
Non-taxable income ⁴	(5.4)	-	(5.4)		(4.5)	-	(4.5)	
Property disposals	-	-	-		(0.8)	-	(0.8)	
Tax rate differential on profits and losses of overseas subsidiaries	-	-	-		0.4	-	0.4	
Group relief not paid at standard rate ⁵	(4.7)	-	(4.7)		-	-	-	
Other	0.2	-	0.2		-	-	-	
Tax (credit)/charge as adjusted for recurring items	(318.0)	16.1	(301.9)	18.4%	(192.3)	14.0	(178.3)	18.8%
<i>Non-recurring items:</i>								
Impact of tax rate change on temporary timing differences	297.0	-	297.0		(0.4)	-	(0.4)	
Adjustments in respect of prior periods – group relief ⁵	11.9	-	11.9		(1.1)	-	(1.1)	
Adjustments in respect of prior periods – deferred tax	1.8	-	1.8		1.0	-	1.0	
Total tax (credit)/charge	(7.3)	16.1	8.8	(0.5%)	(192.8)	14.0	(178.8)	18.8%

¹ The government has introduced an accelerated capital allowance called a "super-deduction" which is available on some of the Group's capital expenditure. The allowance includes an additional 30% allowance in excess of expenditure on qualifying plant and machinery which results in a tax credit in the income statement. A super-deduction allowance will also be available on some of the Group's capital expenditure in the following period, and this is therefore shown as a recurring item.

² Disallowable expenditure includes fines included in operating expenses.

³ Under Corporate Interest Restriction legislation, some interest payable by the Group is not allowable for tax.

⁴ Non-taxable income relates primarily to income from new service connections. This income is reflected in the financial statements as non-taxable income under IFRS principles, while cost of the new service connections fixed assets is not eligible for capital allowances.

⁵ For the years up to and including 31 March 2019, the KWH Group's disallowance under the Corporate Interest Restriction ("CIR") rules had been allocated to the Group's immediate parent, Kemble Water Eurobond plc ("KWE"). For the year ended 31 March 2020 onwards, the Company is now bearing the KWH Group's CIR disallowance, which reduces tax losses available for sale by the Company as group relief in those years. During the year, the Company has sold group relief to KWE for those years at a rate in excess of the corporation tax rate, to compensate the Company for bearing the element of the KWH Group's CIR disallowance that is attributable to interest on the shareholder debt in KWE. This resulted in an additional group relief credit of £4.7 million in respect of the current year, and £18.5 million in respect of prior years, thereby reducing the adjustments to current tax charge in respect of prior periods by £18.5 million to £11.9 million.

The effective tax rate, as adjusted for recurring tax items, of 18.4% is lower than the standard rate of corporation tax for the year of 19.0%, primarily because interest payable not allowable for tax results in a lower tax credit on the loss before tax.

The Group is not currently in a cash tax paying position with HMRC (although companies within the Group do pay for group relief), primarily due to capital allowances on capital expenditure and tax deductions for borrowing costs. The differences between the (loss)/profit on ordinary activities before taxation at the standard tax rate and the current tax (credit)/charge for the year are set out overleaf.

Notes to the Group financial statements (continued)

8. Taxation on loss/(profit) on ordinary activities (continued)

Tax charge/(credit) in the income statement (continued)

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
(Loss)/profit on ordinary activities before taxation	(1,725.3)	84.8	(1,640.5)	(1,024.1)	73.6	(950.5)
Tax at 19% (2021: 19%)	(327.8)	16.1	(311.7)	(194.6)	14.0	(180.6)
<i>Effects of:</i>						
Depreciation on assets that do not qualify for relief	3.9	-	3.9	4.4	-	4.4
Disallowable expenditure	8.5	-	8.5	2.8	-	2.8
Interest payable not allowable for tax	9.6	-	9.6	-	-	-
Non-taxable income	(5.4)	-	(5.4)	(4.5)	-	(4.5)
Property disposals	-	-	-	(0.8)	-	(0.8)
Tax rate differential on profits and losses of overseas subsidiaries	-	-	-	0.4	-	0.4
Capital allowances for the year less than/(in excess of) depreciation	81.6	-	81.6	(12.7)	-	(12.7)
Capitalised borrowing costs allowable for tax ⁶	(21.9)	-	(21.9)	(13.3)	-	(13.3)
Losses on financial derivatives ⁷	110.9	-	110.9	89.9	-	89.9
Pension cost charge higher than/(lower than) pension contributions ⁸	0.5	-	0.5	(17.1)	-	(17.1)
Other short term timing differences	(3.5)	-	(3.5)	4.9	-	4.9
Group relief not paid at statutory tax rate	(4.7)	-	(4.7)	-	-	-
Adjustments in respect of prior periods	11.9	-	11.9	(1.1)	-	(1.1)
Current tax (credit)/charge for the year	(136.4)	16.1	(120.3)	(141.7)	14.0	(127.7)

⁶ Capitalised borrowing costs are eligible for a full tax deduction in the year.

⁷ Accounting fair value profits and losses arising on our derivatives are non-taxable and non-deductible respectively, as instead they are taxed as the cash flows arise. Deferred tax is provided on these temporary differences.

⁸ The Group made higher pension contributions in the prior year as a result of the additional pension deficit repair payment, which received tax relief. The Group reduced its claim for capital allowances accordingly so that current tax was not affected; as a result, no tax amounts were booked to OCI in respect of the pension deficit repair payment.

Uncertain tax positions

At 31 March 2022 the total value of provisions for uncertain corporation tax positions was £nil (2021: £nil).

Tax credited directly to other comprehensive income

The deferred tax credited/(charged) directly to other comprehensive income during the year is as follows:

Year ended 31 March	2022 £m	2021 £m
Tax credit on net actuarial loss in year	11.8	43.2
Impact of tax rate change on net actuarial losses	31.1	-
	42.9	43.2
Tax charge on cash flow hedges in year	(5.8)	(7.1)
Impact of tax rate change on cash flow hedges	1.3	-
	(4.5)	(7.1)
Total credited directly to other comprehensive income	38.4	36.1

In the Spring Budget 2021, the UK Government announced that from 1 April 2023 the corporation tax rate would increase from 19% to 25%. This new law was substantively enacted on 24 May 2021. Deferred taxes at the balance sheet date have been measured using these enacted tax rates and reflected in these financial statements, except for deferred tax on timing differences which are expected to unwind by 31 March 2023 which continues to be provided at the current rate of 19% (35% for the deferred tax on the surplus on the TWMIPS pension scheme). The impact of the rate change affects deferred tax amounts in the income statement and in other comprehensive income as shown above.

Notes to the Group financial statements (continued)

9. Goodwill

The Directors have reviewed the carrying value of goodwill of £1,468.1 million (2021: £1,468.1 million) in line with the accounting policy and do not consider there to be any impairment to this carrying value for the year ended 31 March 2022 (2021: £nil).

All purchased goodwill, which arose on acquisition of the Thames Water Utilities Limited in 2006, has been allocated to the regulated water and wastewater business. Impairment of this purchased goodwill occurs where the carrying value is in excess of the net realisable value, the expected sales value of the regulated business.

An equity valuation model has been used which takes an external, observable, market multiplier uplift to the Regulatory Capital Value ("RCV") of the regulated business. This model has also been informed by recent equity transactions, involving the sale of shares in KWH by existing shareholders. Ofwat, an external regulator, have developed the RCV as a measure of the capital value of the business. The multiple has been calculated from average RCV premiums for water industry peers (share transactions over the past 15 years), and a control premium on equity (using average infrastructure takeover control premiums provided by the Royal Bank of Canada).

The critical assumption is thus the multiple of RCV used. As at 31 March 2022, for the carrying amount of goodwill to exceed the recoverable amount, a reduction of 38.0% (2021: 27.0%) to the multiplier used would be required.

10. Interests in joint venture

Thames Water Limited, a wholly owned subsidiary of the Group, controls 50% of the share capital of Foudry Properties Limited ("Foudry"), a property company incorporated in the United Kingdom. Foudry made a loss in 2022 of £0.2 million (2021: £0.3 million) and has net liabilities of £12.6 million (2021: £12.3 million). The Group's share of these losses relate solely to loan and associated interest balances owed to the Group, which have been fully provided for, and consequently no separate provision in respect of these losses has been recognised.

As at 31 March 2022 the joint venture did not have any significant contingent liabilities to which the Group was exposed and the Group did not have any significant contingent liabilities in relation to its interests in the joint venture (2021: £nil). The Group had no capital commitments in relation to its interests in the joint venture as at 31 March 2022 (2021: £nil).

11. Intangible assets

	Software £m	Other £m	Assets in development £m	Total £m
<i>Cost:</i>				
At 1 April 2020	458.7	1.3	26.8	486.8
Additions	-	-	54.8	54.8
Transfers between categories and from PPE	35.9	-	(35.9)	-
Disposals	(89.0)	-	-	(89.0)
At 31 March 2021	405.6	1.3	45.7	452.6
Additions	-	-	72.3	72.3
Transfers between categories and from PPE	78.5	-	(78.5)	-
Disposals	(12.6)	-	-	(12.6)
At 31 March 2022	471.5	1.3	39.5	512.3
<i>Accumulated amortisation:</i>				
At 1 April 2020	(212.0)	(1.1)	-	(213.1)
Amortisation charge	(51.9)	(0.1)	-	(52.0)
Disposals	89.0	-	-	89.0
At 31 March 2021	(174.9)	(1.2)	-	(176.1)
Amortisation charge	(55.6)	-	-	(55.6)
Disposals	4.4	-	-	4.4
At 31 March 2022	(226.1)	(1.2)	-	(227.3)
<i>Net book value:</i>				
At 31 March 2021	230.7	0.1	45.7	276.5
At 31 March 2022	245.4	0.1	39.5	285.0

Notes to the Group financial statements (continued)

11. Intangible assets (continued)

The amount of borrowing costs capitalised as intangible assets is £0.5m (2021: £nil). The effective rate of borrowing costs for the financial year ended 31 March 2022 was 6.63%.

During the year, £12.6 million has been included within disposals, for assets with book value amounting to £8.1 million relating to customisation and configuration costs that had been previously capitalised. These costs were subsequently reclassified as operating expense in line with the IFRIC Second Agenda Decision involving Software-as-a-Service arrangements.

The gross carrying amount of intangible assets that was fully amortised at 31 March 2022 amounted to £114.5 million (2021: £60.9 million).

12. Property, plant and equipment

	Land & buildings £m	Plant & equipment £m	Network assets £m	Assets under construction £m	Total £m
<i>Cost:</i>					
At 1 April 2020 ¹	3,861.0	8,558.0	7,823.1	2,853.3	23,095.4
Additions	-	0.2	28.6	1,021.4	1,050.2
Transfers between categories	125.1	482.9	548.1	(1,156.1)	-
Disposals	-	(184.5)	-	-	(184.5)
At 31 March 2021	3,986.1	8,856.6	8,399.8	2,718.6	23,961.1
Additions	-	0.6	37.3	1,233.8	1,271.7
Transfers between categories ²	236.0	641.0	647.4	(1,524.4)	-
Disposals	(1.5)	(145.6)	(22.8)	-	(169.9)
At 31 March 2022	4,220.6	9,352.6	9,061.7	2,428.0	25,062.9
<i>Accumulated depreciation:</i>					
At 1 April 2020 ¹	(1,136.7)	(4,913.9)	(766.1)	-	(6,816.7)
Depreciation charge	(64.0)	(379.5)	(137.3)	-	(580.8)
Disposals	-	183.1	-	-	183.1
At 31 March 2021	(1,200.7)	(5,110.3)	(903.4)	-	(7,214.4)
Depreciation charge	(79.2)	(418.9)	(147.7)	-	(645.8)
Disposals	1.5	144.9	23.7	-	170.1
At 31 March 2022	(1,278.4)	(5,384.3)	(1,027.4)	-	(7,690.1)
<i>Net book value:</i>					
At 31 March 2021	2,785.4	3,746.3	7,496.4	2,718.6	16,746.7
At 31 March 2022	2,942.2	3,968.3	8,034.3	2,428.0	17,372.8

¹ Assets of £50.0 million which meet the definition of Investment Properties under IAS 40 have been reclassified from Property, Plant and Equipment and disclosed separately in the statement of financial position.

² Included within Transfer between categories in the year are capitalised costs classified to Land and Buildings (£128.8 million), Plant & Equipment (£213.2 million) and Network Assets (£236.9 million) asset categories, with a total balance of £578.7 million, which should have been commissioned in the prior year. The related depreciation charge to these assets, amounting to £19.3 million, are also presented in the current year of these financial statements.

£114.8 million of borrowing costs were capitalised in the period (2021: £69.7 million). The effective annual capitalisation rate for borrowing costs was 6.6% (2021: 3.3%).

The gross carrying amount of property, plant and equipment that was fully depreciated at 31 March 2022 amounted to £2.7 billion (2021: £2.6 billion).

During the year the group disposed of £169.9 million (2021: £181.4 million) of property, plant and equipment assets which relate to assets with a nil Net Book Value.

As at 31 March 2021, Land and Buildings within the Property, plant and equipment note included purchases made in relation to the Thames Tideway Tunnel project; an element of which will not form part of the asset to be depreciated when the asset is brought into use. These land and buildings were acquired to perform necessary works relating to the construction and integration of the tunnel into our network and will be disposed of in due course once the required works have been completed.

Notes to the Group financial statements (continued)

12. Property, plant and equipment (continued)

One of these land and buildings relate to a building that in substance was acquired to facilitate the access requirements for the Thames Tideway Tunnel project; however, this building is being offered to external parties under short term leases and, therefore, the property meets the definition of an Investment Property. The Group has chosen to account for this under the cost method of IAS 40 with a carrying value of £50.0 million.

In the current year financial statements, to facilitate greater transparency, the building aforementioned, with carrying value of £50.0 million, has been appropriately reclassified to Investment Properties effective as at 1 April 2020. This has resulted in no change to the previously reported Net or Non-current assets values, with the previously reported cost and Net Book Value of land and buildings at 31 March 2021 as disclosed within Property, Plant and Equipment of £2,835.4 million being reduced to £2,785.4 million. In the Annual Report and Sustainability Report 2020/21 it was reported in error that there were assets of value £113.1 million which met the definition of Investment Property under IAS 40, this should have stated £50.0 million.

Based on an expectation that this property will be disposed of in the next few years the recoverable amount and residual value of this property as at 31 March 2022 are assessed by the Group to be materially the same as the carrying value. The rental income earned by the Group in relation to this property in the year ended 31 March 2022 is £5.3 million (2021: £5.8 million). The rental expense incurred by the Group in relation to this property in the year ended 31 March 2022 is £2.8 million (2021: £1.6 million).

Further, within Land and Buildings are £45.4 million of land and buildings acquired as part of the construction of Thames Tideway Tunnel under long leaseholds. The buildings acquired were presented within Land and Buildings within our Property, plant and equipment disclosure note as at 31 March 2021. Whilst these leases meet the definition of Right-of-use assets, because these are in substance purchases of leasehold property and to remain consistent with prior periods, these continue to be recognised within Land and Buildings.

A £10.0 million impairment was recognised during the year within Assets Under Construction, as a credit to additions, due to a plant that will require additional investment to operate as intended by management. The corresponding impairment loss was recognised in the income statement.

13. Investment property

	Total £m
Cost:	
At 1 April 2020 ¹	50.0
At 31 March 2021	50.0
At 31 March 2022	50.0
Accumulated depreciation:	
At 1 April 2020 ¹	-
At 31 March 2021	-
At 31 March 2022	-
Net book value:	
At 31 March 2021	50.0
At 31 March 2022	50.0

¹As at 31 March 2021, Land and Buildings within the Property, plant and equipment note included £50.0 million relating to investment property. See note 12 Property, plant and equipment for further information. The fair value of investment property is determined to be materially equal to its carrying value.

The value was determined in the prior period through consultation with an independent professional valuer, who holds a recognised and relevant professional qualification and has recent experience in the location and category of the investment property being valued. In the current period no external consultation was performed in management's assessment that the fair value was materially unchanged.

Notes to the Group financial statements (continued)

14. Leases

(i) Amounts recognised in the statement of financial position

Right-of-use assets		
As at 31 March	2022	2021
	£m	£m
Land and buildings	45.8	41.6
Total	45.8	41.6

Additions to right-of-use assets during the year ended 31 March 2022 were £10.0 million which arose as a result of lease modifications (2021: £0.7 million).

Lease liabilities		
As at 31 March	2022	2021
	£m	£m
Current	(6.2)	(7.5)
Non-current	(57.1)	(52.9)
Total	(63.3)	(60.4)

(ii) Amounts recognised in the income statement

For the year ended 31 March	2022	2021
	£m	£m
Depreciation charge of right-of-use assets	6.6	8.0
Interest expense included in finance costs	3.2	3.4
Expense relating to short-term leases, low value assets and variable lease payments not included in lease liabilities	9.0	6.6
Total	18.8	18.0

The total cash outflow for leases during the year ended 31 March 2022 was £9.9 million (2021: £10.9 million).

The total leases repayments expected over the next year are £6.1 million (2021: £7.5 million), over the next 1-5 years are £20.7 million (2021: £16.5 million) and over more than 5 years are £36.5 million (2021: £36.4 million).

The Group's leasing activities consist of rentals payable for office properties and other land and buildings.

15. Inventories

	2022	2021
	£m	£m
Raw materials and consumables	13.0	14.9
Total	13.0	14.9

Notes to the Group financial statements (continued)

16. Trade and other receivables

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
<i>Non-current:</i>						
Prepayments and accrued income	-	308.8	308.8	-	228.9	228.9
Insurance claims receivable	35.4	-	35.4	45.1	-	45.1
Other receivables	10.4	-	10.4	6.3	-	6.3
	45.8	308.8	354.6	51.4	228.9	280.3
<i>Current:</i>						
Gross trade receivables	448.7	17.7	466.4	441.2	15.2	456.4
Less doubtful debt provision	(146.8)	(3.7)	(150.5)	(143.1)	(3.2)	(146.3)
Net trade receivables	301.9	14.0	315.9	298.1	12.0	310.1
Amounts owed by associated undertakings	0.5	-	0.5	0.4	-	0.4
Amounts receivable/(payable) in respect of group relief	188.9	(36.2)	152.7	268.5	(20.1)	248.4
Prepayments and accrued income	36.9	-	36.9	38.4	-	38.4
Other receivables	37.0	1.0	38.0	29.9	0.8	30.7
	565.2	(21.2)	544.0	635.3	(7.3)	628.0
<i>Current:</i>						
Contract assets	251.7	8.5	260.2	240.0	5.8	245.8
Total	862.7	296.1	1,158.8	926.7	227.4	1,154.1

The Directors consider that the carrying amount of trade and other receivables is approximately equal to their fair value. The Directors believe that the Group is well placed to manage its business risks successfully, despite the current uncertainties of macroeconomic factors including the rise in costs of living.

Non-current prepayments at 31 March 2022 includes £308.8 million (2021: £228.9 million) of prepayment relating to the Bazalgette Tunnel Limited ("BTL") arrangement. The prepayment is created and recorded by the Group as BTL will transfer the use of the tunnel to Thames Water Utilities Limited once construction is complete, against which this prepayment will be utilised. On completion of construction of the Thames Tideway Tunnel, substantially all the risks and rewards of ownership will lie with the Group. The Group will therefore account for the transaction arrangement with BTL post construction in accordance with IFRS 16 'Leases'. The tunnel will be recognised as a right of use asset and depreciated over the life of the contract.

Contract assets at 31 March 2022 includes £183.8 million (2021: £176.7 million) of services provided to metered customers. Included within this amount is a provision of £4.6 million for bad debt (2021: £7.1 million). The remaining amount is for accrued capital contributions and accrued income from the BTL arrangement.

Expected credit loss provision

Movements in the expected credit losses provision were as follows:

	2022 £m	2021 £m
At 1 April	(146.4)	(187.8)
Charge for bad and doubtful debts – charged against revenue ¹	(67.4)	(41.0)
Charge for bad and doubtful debts – included within operating expenses	(10.2)	(36.8)
Amounts written off (utilised)	73.5	119.2
Total at 31 March	(150.5)	(146.4)

¹ Included within this is a £10.3 million increase (2021: £8.9 million decrease) in the cancel rebill provision. This covers amounts which have been billed, but will be cancelled at a later date and then not rebilled. The increase of the provision in the current financial year is debited to gross revenue. The remaining amount relates to the £57.2 million charge for bad and doubtful debts against revenue as seen in note 1.

Ageing of gross receivables is as follows:

	2022 £m	2021 £m
Up to 365 days	311.3	318.3
1 – 2 years	87.0	73.0
2 – 3 years	34.1	33.6
More than 3 years	34.0	31.5
Total	466.4	456.4

Notes to the Group financial statements (continued)

16. Trade and other receivables (continued)

Expected credit loss provision (continued)

The ageing of gross BTL receivables¹ is as follows:

	2022 £m	2021 £m
Up to 365 days	12.8	11.4
1 – 2 years	3.6	2.6
2 – 3 years	1.3	1.2
Total	17.7	15.2

BTL receivables relates to the value of receivables collected from other parties and passed on to BTL.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. This is calculated based on historical experience of levels of recovery and expectation of what might happen in the future.

Expected credit loss split by ageing is as follows:

As at 31 March	2022 £m	2021 £m
Up to 365 days	84.4	74.5
1 – 2 years	25.3	29.5
2 – 3 years	12.1	15.4
More than 3 years	28.7	27.0
Total	150.5	146.4

The ageing of impaired BTL receivables is as follows:

	2022 £m	2021 £m
Up to 365 days	2.6	2.0
1 – 2 years	0.8	0.8
2 – 3 years	0.3	0.4
Total	3.7	3.2

17. Cash and cash equivalents

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
Cash at bank and in hand	17.5	-	17.5	6.4	-	6.4
Money market funds	679.8	5.2	685.0	796.8	3.6	800.4
Total	697.3	5.2	702.5	803.2	3.6	806.8

BTL cash represents amounts collected from wastewater customers, for the construction costs of the Thames Tideway Tunnel, which has not yet been paid at the reporting date.

Notes to the Group financial statements (continued)

18. Trade and other payables

	Underlying £m	2022 BTL £m	Total £m	Underlying £m	2021 BTL £m	Total £m
<i>Non-current:</i>						
Contract liabilities	831.8	-	831.8	757.3	-	757.3
<i>Current:</i>						
Trade payables – operating	248.4	-	248.4	196.2	-	196.2
Amounts owed to Bazalgette Tunnel Limited	-	13.0	13.0	-	11.4	11.4
Accruals	327.3	-	327.3	370.5	-	370.5
Other taxation and social security	8.9	-	8.9	8.3	-	8.3
Other payables	77.2	-	77.2	32.1	-	32.1
	661.7	13.0	674.7	607.1	11.4	618.5
<i>Current:</i>						
Contract liabilities	125.1	2.0	127.1	121.9	2.1	124.0
Total	1,618.6	15.0	1,633.6	1,486.3	13.5	1,499.8

Current contract liabilities at 31 March 2022 includes £74.0 million (2021: £75.4 million) of receipts in advance from customers for water and wastewater charges. The remaining amount relates to payment in advance in relation to compensation received for infrastructure charges, including deposits and other fees for service connections and requisitions.

Non-current contract liabilities at 31 March 2022 includes £534.6 million (2021: £522.7 million) of deferred infrastructure charges and £290.4 million of deferred income for nil cost “adopted” assets (2021: £227.8 million).

Other payables at 31 March 2022 includes £45.9 million (2021: £38.9 million) of credit balances on customer accounts as a result of payments exceeding amounts billed to date, for example those customers who pay by direct debit who are yet to be billed.

The Directors consider that the carrying amount of trade and other payables within the scope of IFRS 7 is approximately equal to their fair value as outlined in the “Comparison of fair value of financial instruments with their carrying amounts” section of Note 20 Financial Instruments.

19. Borrowings

	2022 £m	2021 £m
Secured bank loans and private placements	4,381.5	4,443.0
Bonds	10,330.8	9,737.2
Amounts owed to group undertakings	3,100.6	3,100.6
	17,812.9	17,280.8
Interest payable on secured bank loans, private placements and bonds	182.0	192.0
Interest payable on amounts owed to group undertakings	4,345.6	3,865.2
	4,527.6	4,057.2
Total	22,340.5	21,338.0
Disclosed within current liabilities	887.1	1,146.1
Disclosed within non-current liabilities	21,453.4	20,191.9

Secured bank loans refers to (i) the Group’s secured bank loans under an Intercreditor Deed with the holding company’s Security Trustee; and (ii) the secured bank loans under an arrangement whereby each Obligor (representing each of the companies within the whole business securitisation group) has entered into a Security Trust and Intercompany Deed (“STID”) with the operating company’s Security Trustee. Pursuant to this arrangement, TWUHL has guaranteed the obligations of each other Obligor (TWUL and TWUF) under the finance agreement. Additionally, TWUL and TWUF have guaranteed the obligations of each other under the finance agreement, in each case to the Security Trustee.

Notes to the Group financial statements (continued)

19. Borrowings (continued)

Breakdown of secured bank loans and private placements:

	2022 £m	2021 £m
Thames Water Utilities Limited:		
£75.0m 1.350% index linked loan due 2021 (e), (h)	-	92.9
£215.0m 0.460% index-linked loan due 2023 (a), (h)	278.7	258.4
£215.0m 0.380% index-linked loan due 2032 (a), (b), (h)	192.8	195.0
£100.0m 3.261% index-linked loan due 2043 (a), (d), (h)	145.6	135.0
£100.0m 0.790% index-linked loan due 2025 (a), (e), (h)	123.4	114.4
£125.0m 0.598% index-linked loan due 2026 (a), (e), (h)	153.4	142.3
£70.0m Class B 3.867% fixed rate loan due 2026 (a)	70.0	70.0
£50.0m Class B 3.875% fixed rate loan due 2026 (a)	50.0	50.0
£20.0m Class B floating rate loan due 2026 (a), (k)	20.0	20.0
£39.0m Class B 3.918% fixed rate loan due 2026 (a)	38.7	38.6
£55.0m 3.380% private placement due 2023 (a), (f)	41.8	39.9
\$285.0m 3.570% private placement due 2025 (a), (f)	216.5	206.5
£216.0m 2.450% private placement due 2028 (a)	215.6	215.5
£210m 2.550% private placement due 2030 (a)	209.4	209.4
£40m 2.620% private placement due 2033 (a)	39.9	39.8
£150.0m floating rate loan due 2024 (a), (k)	149.8	149.7
£125.0m floating rate loan due 2024 (a), (k), (l)	124.7	124.6
£50.0m floating rate loan due 2022 (a), (l)	50.0	49.9
£63.1m floating rate loan due 2027 (a), (k), (m)	62.9	62.9
£63.1m floating rate loan due 2029 (a), (k), (m)	62.9	62.9
£63.1m floating rate loan due 2031 (a), (k)	62.9	62.8
Thames Water Utilities Limited total	2,309.0	2,340.5
Thames Water Utilities Finance plc		
£214.3m Class B floating rate loan due 2021 (c)	-	214.3
£150.0m Class B floating rate loan due 2023 (c), (i)	-	150.0
£150.0m Class B floating rate loan due 2023 (c), (i)	-	150.0
\$106.0m 4.070% private placement due 2026 (a), (f)	80.5	76.8
\$131.0m 4.270% private placement due 2029 (a), (f)	99.3	94.7
€50.0m 2.100% private placement due 2030 (a), (f)	42.1	42.4
\$150.0m 3.870% private placement due 2022 (f)	-	108.9
\$200.0m 4.020% private placement due 2024 (f)	152.1	145.2
\$250.0m 4.220% private placement due 2027 (f)	190.1	181.4
£200.0m Class B floating rate loan due 2026 (a)	197.3	-
£220.7m Class B floating rate loan due 2022 (c), (g), (k)	220.7	-
£75.0m Class B floating rate loan due 2022 (g), (j), (k)	75.0	-
£75.0m Class B floating rate loan due 2022 (g)	75.0	-
Thames Water Utilities Finance plc total	1,132.1	1,163.7
Kemble Water Finance Limited:		
£200.0m floating rate loan due 2025 (a), (k)	198.8	198.5
£4.5m 5.3% fixed rate loan due 2025 (a)	4.4	4.4
£5.5m 5.3% fixed rate loan due 2025 (a)	5.4	5.4
£100.0m 5.3% fixed rate loan due 2025 (a)	98.9	98.6
£200.0m 5.3% fixed rate loan due 2025 (a)	197.7	197.1
£149.8m 5.39% fixed rate loan due 2026 (a)	148.0	147.6
£190.0m floating rate loan due 2024 (a), (k)	188.2	188.4
£50.0m 5.26% private placement due 2027 (a)	49.6	49.5
£50.0m 5.27% private placement due 2028 (a)	49.4	49.3
Kemble Water Finance Limited total	940.4	938.8
Total secured bank loans and private placements	4,381.5	4,443.0

Notes to the Group financial statements (continued)

19. Borrowings (continued)

All TWUL and TWUF loans are Class A except where highlighted.

- (a) These loans and private placements are shown net of issuance costs.
- (b) This debt amortises in equal tranches from 2017 onwards.
- (c) The interest margin of these loans is based on a ratings grid and varies depending on the senior debt credit rating of the Group as assigned by both Standard and Poor's and Moody's and the Group's GRESB score.
- (d) This debt amortises from 2023 to 2033 in tranches of £3.0 million, followed by tranches of £750,000 until maturity where there will be a bullet payment of £25.0 million.
- (e) These loans contain a collar mechanism that limits total accretion repayment within a predetermined range.
- (f) The Group has entered into cross currency swap agreements which convert this debt into sterling debt.
- (g) In March 2022, the £370.7 million Class B revolving credit facilities were drawn in full. In April 2022, these Class B drawdowns were fully repaid.
- (h) The value of the capital and interest elements of the index-linked loans is linked to movements in the Retail Price Index ("RPI").
- (i) In June 2021, the Group early repaid two £150.0 million floating rate loans that were due to mature in 2023.
- (j) The interest margin of this loan is based on a ratings grid and varies depending on the senior debt credit rating of the Group as assigned by both Standard and Poor's and Moody's.
- (k) During the year, these loans have transitioned to SONIA (Sterling Overnight Index Average) from Libor (London Inter-Bank Offered Rate).
- (l) These loans contain a circular economy adjustment that reduces the interest rate if certain key performance indicators are met.
- (m) In April 2022, the Group early repaid the £63.1 million floating rate loan that was due to mature in 2027 and made a part-prepayment of £11.9 million of the £63.1 million (now £51.2 million) floating rate loan that matures in 2029.

Breakdown of bonds:	2022 £m	2021 £m
Thames Water Utilities Finance plc		
£225.0m 6.590% Fixed rate bond due 2021 (k)	-	225.3
£175.0m 3.375% Index-linked bond due 2021 (b), (d)	-	295.2
£330.0m 6.750% Fixed rate bond due 2028 (b), (h)	368.1	373.0
£200.0m 6.500% Fixed rate bond due 2032 (b), (c), (j)	234.0	236.7
£600.0m 5.125% Fixed rate bond due 2037 (b), (c), (l)	647.2	649.3
£300.0m 1.680% Index-linked bond due 2053 (b), (d)	472.4	454.7
£300.0m 1.681% Index-linked bond due 2055 (b), (d)	472.4	454.7
€113.0m 2.300% CPI index linked bond due 2022 (a), (c)	109.2	104.7
£300.0m 5.750% class B Fixed rate bond due 2030 (b), (e)	299.2	298.9
£300.0m 4.375% fixed rate bond due 2034 (b)	296.3	296.1
¥20.0bn 3.280% fixed rate bond due 2038 (a), (b), (c)	125.2	131.2
£50.0m 3.853% index linked bond due 2040 (g)	72.8	67.5
£500.0m 5.500% fixed rate bond due 2041 (b)	490.6	490.3
£50.0m 1.980% index-linked bond due 2042 (d)	76.6	71.3
£55.0m 2.091% index-linked bond due 2042 (b), (d)	81.7	75.8
£40.0m 1.974% index-linked bond due 2045 (b), (d)	47.2	45.2
£300.0m 4.625% fixed rate bond due 2046 (b)	293.6	293.5
£100.0m 1.846% index-linked bond due 2047 (d)	153.3	142.5
£200.0m 1.819% index-linked bond due 2049 (b), (d)	306.2	284.7
£200.0m 1.771% index-linked bond due 2057 (b), (d)	306.1	284.6
£350.0m 1.760% index-linked due 2062 (b), (d)	535.7	498.1
£500.0m 4.000% fixed rate due 2025 (b)	497.7	497.1
£40.0m 0.750% index-linked loan due 2034 (b), (d)	48.9	45.3
£45.0m 0.721% index-linked loan due 2027 (b), (d)	54.9	50.9
£300.0m 3.500% fixed rate loan due 2028 (b)	297.6	297.3
£400.0m 7.738% fixed rate bond due 2058 (b)	418.0	418.7
£250.0m 1.875% fixed rate bond due 2024 (b)	249.3	248.9
£250.0m 2.625% fixed rate bond due 2032 (b)	247.9	247.7
£300.0m 2.375% class B Fixed rate bond due 2023 (b)	299.6	299.3
£250.0m 2.875% class B Fixed rate bond due 2027 (b)	248.0	247.6
CAD 250.0m 2.875% fixed rate bond due 2024 (a), (b)	151.5	143.2
£350.0m 2.375% fixed rate bond due 2040 (b)	346.1	345.9
£40.0m 2.442% fixed rate bond due 2050 (b)	39.9	39.9
£84.7m 0.875% fixed rate bond due 2023 (b)	84.5	84.6
€500.0m 0.190% fixed rate bond due 2023 (a), (b)	421.3	424.6
\$57.0m 2.060% fixed rate bond due 2030 (a), (b)	43.2	41.3
\$40.0m 1.604% fixed rate bond due 2027 (a), (b)	30.4	29.1

Notes to the Group financial statements (continued)

19. Borrowings (continued)

Breakdown of bonds (continued):

€575.0m 0.875% fixed rate bond due 2028 (a), (b)	482.6	-
€575.0m 1.250% fixed rate bond due 2032 (a), (b)	478.3	-
Fee (f)	(10.3)	(10.6)
Thames Water Utilities Finance Limited total	9,817.2	9,224.1
Thames Water (Kemble) Finance plc		
£175.0m 5.875% fixed rate bond due 2022 (b)	115.0	114.8
£400.0m 4.625% fixed rate bond due 2026 (b)	398.6	398.3
Thames Water (Kemble) Finance plc total	513.6	513.1
Total bonds	10,330.8	9,737.2

All TWUF bonds are Class A except where highlighted.

- (a) The Group has entered into cross currency swap agreements which convert this debt into sterling debt.
- (b) These bonds are shown net of issuance costs.
- (c) The Group has entered into swap agreements that convert this debt into GBP (£) RPI-linked debt.
- (d) The value of the capital and interest elements of the index-linked debt is linked to movements in the Retail Price Index ("RPI").
- (e) In September 2022 this Class B bond has a 'Step Up and Call' meaning the interest rate changes to 3 months LIBOR plus 7.97% at which point the issuer can exercise a call option to redeem the nominal value of the debt at par value. Our current expectation is that the call option will be exercised.
- (f) These fees have been shown in the table above to reflect that they relate to RPI-linked bonds issued in 2007.
- (g) This is a Limited Price Index ("LPI") bond. Accretion is calculated using an adjusted UK Retail Price Index.
- (h) This bond includes £40.0 million (2021: £45.1 million) fair value adjustments to carrying value at acquisition by Kemble Water Holdings Group.
- (i) This bond includes £35.8 million (2021: £38.6 million) fair value adjustments to carrying value at acquisition by Kemble Water Holdings Group.
- (j) This bond includes £50.3 million (2021: £52.6 million) fair value adjustments to carrying value at acquisition by Kemble Water Holdings Group.
- (k) This bond includes £nil (2021: £0.2 million) fair value adjustments to carrying value at acquisition by Kemble Water Holdings Group.

The total carrying value of the fair value adjustment to the debt on acquisition of the Thames Water Group by Kemble Water Holdings Group is £126.1 million (2021: £136.5 million). Capitalised debt issuance costs in relation to the debt portfolio are £90.5 million (2021: £85.8 million).

Breakdown of amounts owed to group undertakings:

	2022	2021
	£m	£m
Kemble Water Eurobond plc		
£3,100.6m fixed rate due on demand (a)	3,100.6	3,100.6
Total amounts owed to group undertakings	3,100.6	3,100.6

- (a) This loan is repayable on demand, however the Directors confirm that there will be no repayment within 12 months and a letter of comfort has been obtained from the counterparty to confirm that no repayment will be sought for at least 12 months from the date of signing the financial statements. Therefore, amounts owed to group undertakings has been classified as non-current.

Notes to the Group financial statements (continued)

20. Financial instruments

Categories of financial instruments

The carrying values of the primary financial assets and liabilities of the group are as follows:

	2022 £m	2021 £m
Financial assets:		
<i>Fair value through profit or loss</i>		
Cross currency swaps	82.1	63.5
Interest rate swaps	34.1	16.2
Index-linked swaps	75.9	83.7
Cash and cash equivalents – money market funds	685.0	800.4
	877.1	963.8
<i>Amortised cost</i>		
Trade and other receivables (excluding prepayments)	552.8	641.0
Cash and cash equivalents – cash at bank and in hand	17.5	6.4
	570.3	647.4
Total	1,447.4	1,611.2
Financial liabilities:		
<i>Fair value through profit or loss</i>		
Cross currency swaps	(125.1)	(113.6)
Interest rate swaps	(140.8)	(166.6)
Index-linked swaps	(2,075.8)	(1,189.7)
	(2,341.7)	(1,469.9)
<i>Amortised cost</i>		
Trade and other payables (excluding other taxation and social security)	(665.8)	(610.2)
Borrowings	(22,340.5)	(21,338.0)
Lease liabilities	(63.3)	(60.4)
	(23,069.6)	(22,008.6)
Total	(25,411.3)	(23,478.5)

Fair value measurements

The fair value of financial assets and liabilities represents the price that would be received to sell an asset or paid to transfer a liability between informed and willing parties, other than in a forced or liquidation sale at the measurement date. The techniques for determining the fair value of financial instruments are classified under the hierarchy defined in IFRS 13 *Fair Value Measurement* which categorises inputs to valuation techniques into levels 1 to 3 based on the degree to which the fair value is observable.

Level 1: Quoted prices in active markets for identical assets or liabilities that can be accessed

Level 2: Significant inputs other than within Level 1 that are observable for the asset or liability, either directly or indirectly

Level 3: Inputs for the assets or liabilities that are not based on observable market data and require management assumptions or inputs from unobservable markets.

Unless otherwise stated, all of the Group's inputs to valuation techniques are level 2 – the fair value is determined from inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. Cash and cash equivalents – money market funds are classified as level 1. The fair values of interest rate and index-linked swaps are determined, in part, from unobservable inputs but the use of these unobservable inputs does not significantly impact the result. As a result, we have concluded that it is appropriate to continue to classify the derivative instruments as level 2. The table below sets out the valuation basis of financial instruments (excluding money market funds which are classified as level 1) held at fair value as at 31 March 2022:

	Level 2 ¹ 2022 £m	2021 £m
<i>Financial assets - derivative financial instruments:</i>		
Cross currency swaps	82.1	63.5
Interest rate swaps	34.1	16.2
Index-linked swaps	75.9	83.7
	192.1	163.4
<i>Financial liabilities - derivative financial instruments:</i>		
Cross currency swaps	(125.1)	(113.6)
Interest rate swaps	(140.8)	(166.6)
Index-linked swaps	(2,075.8)	(1,189.7)
	(2,341.7)	(1,469.9)
Net total	(2,149.6)	(1,306.5)

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Fair value measurements (continued)

¹ The fair value of derivative financial instruments, including interest rate swaps, cross currency swaps and index-linked swaps are measured using discounted cash flows of all of the transactions within each netting set. The future cash flows are estimated based on observable forward interest rates and inflation rates and future fair values are estimated under a wide range of market scenarios and discounted at a rate that reflects the credit risk of the Group and counterparties.

During the year, £31.1 million (2021: £37.5 million) was recycled from the cash flow hedge reserve to the income statement, see "Statement of changes in equity" on page 40. The amounts recognised on cash flow hedge reserve are recycled to income statement as phased release over the relevant hedging period and where the related debt has been issued and has not matured.

In November 2019, the maturity date of three index linked swaps, with a total notional value of £400.0 million, were extended. These swaps are measured at fair value through the income statement. At the restructuring date the fair value of these instruments, as indicated by their fair value immediately prior to the restructuring, could not be supported by observable inputs alone. In management's view the reduction in value of £38.0 million at the restructuring date is supported by unobservable factors including the counterparty's credit, capital, funding and trading charges. Therefore, such movement was deferred on the balance sheet in compliance with IFRS 9 and is recognised in the income statement on a straight-line basis over the life of the underlying derivative instrument. As at 31 March 2022, £33.3 million (2021: £35.3 million) remained capitalised and £2.0 million had been recognised in the income statement (2021: £2.0 million).

Comparison of fair value of financial instruments with their carrying amounts

The fair values and carrying values of the Group's financial assets and financial liabilities are set out in the tables below.

	2022		2021	
	Book value £m	Fair value £m	Book value £m	Fair value £m
Financial assets:				
<i>Non-current</i>				
Trade and other receivables (excluding prepayments)	45.8	45.8	51.4	51.4
Derivative financial instruments				
Cross currency swaps	78.5	78.5	51.2	51.2
Interest rate swaps	34.1	34.1	16.2	16.2
Index-linked swaps	56.6	56.6	83.7	83.7
	215.0	215.0	202.5	202.5
<i>Current</i>				
Trade and other receivables (excluding prepayments)	507.0	507.0	589.6	589.6
Cash and cash equivalents	702.5	702.5	806.8	806.8
Derivative financial instruments				
Cross currency swaps	3.6	3.6	12.3	12.3
Index-linked swaps	19.3	19.3	-	-
	1,232.4	1,232.4	1,408.7	1,408.7
Total	1,447.4	1,447.4	1,611.2	1,611.2
Financial liabilities:				
<i>Non-current</i>				
Borrowings:				
Secured bank loans and private placements	(3,902.1)	(4,175.5)	(4,010.8)	(4,423.9)
Bonds	(10,105.1)	(12,985.1)	(9,215.3)	(12,190.5)
Amounts owed to group undertakings	(3,100.6)	(3,100.6)	(3,100.6)	(3,100.6)
Interest payable	(4,345.6)	(4,345.6)	(3,865.2)	(3,865.2)
Lease liabilities	(57.1)	(57.1)	(52.9)	(52.9)
Derivative financial instruments:				
Cross currency swaps	(120.1)	(120.1)	(113.6)	(113.6)
Interest rate swaps	(140.8)	(140.8)	(166.6)	(166.6)
Index-linked swaps	(1,977.8)	(1,977.8)	(1,189.7)	(1,189.7)
	(23,749.2)	(26,902.6)	(21,714.7)	(25,103.0)
<i>Current</i>				
Borrowings:				
Secured bank loans and private placements	(479.4)	(480.2)	(432.2)	(438.6)
Bonds	(225.7)	(231.2)	(521.9)	(507.7)
Interest payable	(182.0)	(182.0)	(192.0)	(192.0)
Trade and other payables (excluding other taxation and social security)	(665.8)	(665.8)	(610.2)	(610.2)
Lease liabilities	(6.2)	(6.2)	(7.5)	(7.5)
Derivative financial instruments:				
Cross currency swaps	(5.0)	(5.0)		
Index-linked swaps	(98.0)	(98.0)		
	(1,662.1)	(1,668.4)	(1,763.8)	(1,756.0)
Total	(25,411.3)	(28,571.0)	(23,478.5)	(26,859.0)

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Comparison of fair value of financial instruments with their carrying amounts (continued)

The fair value of borrowings represents the market value of the publicly traded underlying liquid bonds (level 1 inputs to valuation technique). For private placements and less liquid underlying bonds, the fair value is determined by discounting expected future cash flows using a risk-free rate plus the Group's credit spread, foreign currency values are then translated at the spot rate.

The fair value of index-linked debt instruments is based on the nominal value of the debt plus accretion already accrued and accretion expected to accrue to maturity, discounted using a risk-free rate plus the Group's credit spread. Amounts owed by group undertakings includes a floating rate loan and related interest. The fair value of the entire balance is assumed to be the nominal value due to early repayment rights.

Capital risk management

Capital risk primarily relates to whether the Group is adequately capitalised and financially solvent. The Board reviews the Group's exposure to these risks and actively oversees the treasury activities, reviewing the treasury policy and approving the treasury strategy and funding plan.

The Group's key objectives in managing capital are:

- To maintain a broad portfolio of debt, diversified by source and maturity;
- To retain the Group's investment grade credit rating;
- To provide liquidity sufficient to fund ongoing obligations for a minimum of a 15-month forward period on an ongoing basis; and
- To maintain customer bills at a level which is both affordable and sustainable

Derivative financial instruments are used, where appropriate to manage the risk of fluctuations in interest rates, inflation and foreign exchange rates. No open or speculative positions are taken.

The Group is part of a Whole Business Securitisation ("WBS") Group of companies. The other companies in the Securitisation Group (Thames Water Utilities Finance plc (TWUF) and TWUHL) guarantee the funding activity of TWUL, and TWUL and TWUHL guarantee the funding activity of TWUF, which raises debt finance in external debt markets through the issuance of secured bonds and the entry into loans. The Securitisation Group is required to comply with certain covenants, which include, amongst others:

- Interest cover ratios
- Gearing ratios
- An obligation to manage the maturity profile of debt arrangements
- An obligation to manage the proportion of future interest cost which is fixed and/or index-linked
- Unsecured debt ratios

The Securitisation Group complied with these ratios throughout the financial year.

The Company and its financing subsidiary Thames Water (Kemble) Finance plc (TW(K)F) are party to an Intercreditor Deed and their debt is securitised. KWF is required to comply with certain covenants, which include, amongst others:

- Interest cover ratios
- Gearing ratios.

These requirements were complied with for the financial year.

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Capital risk management (continued)

The capital structure of the Group consists of net debt and equity as follows:

	2022 £m	2021 £m
Secured bank loans and private placements	(4,381.5)	(4,443.0)
Bonds	(10,330.8)	(9,737.2)
Amounts owed to group undertakings	(3,100.6)	(3,100.6)
Interest payable on secured bank loans, private placements and bonds	(182.0)	(192.0)
Interest payable on amounts owed to group undertakings	(4,345.6)	(3,865.2)
Lease liability	(63.3)	(60.4)
	(22,403.8)	(21,398.4)
Cash and cash equivalents ¹	700.2	804.5
Net debt (statutory basis)	(21,703.6)	(20,593.9)
Amounts owed to group undertakings ²	3,085.6	3,085.6
Interest payable on secured bank loans, private placements and bonds	182.0	192.0
Interest payable on amounts owed to group undertakings	4,345.6	3,865.2
Unamortised debt issuance costs and discount	(90.5)	(85.8)
Relevant derivative financial liabilities (Accretion and FX)	(583.9)	(293.3)
Fair value adjustment on acquisition to loans	126.1	136.5
Unamortised IFRS 9 transition adjustment	23.8	24.5
Cash not relevant for covenant	(21.8)	(20.4)
Net debt (covenant basis)	(14,636.7)	(13,689.6)
Equity attributable to owners of the Group	(6,654.1)	(5,051.4)

¹ The cash and cash equivalents balance excludes £2.3m (2021: £2.3 million) which is held as security for the SUURBS defined benefit pension scheme. The use of the cash is restricted for this purpose only.

² Includes £3,100.6 million payable to Kemble Water Eurobond plc which is removed for net debt (covenant) and £15.0 million payable to Thames Water Investments Limited which is included for net debt (covenant).

Net debt (covenant basis) excludes accrued interest, amounts owed to group undertakings, unamortised debt issuance costs and discounts, unamortised IFRS 9 adjustment, cash not relevant for covenant based on covenant definitions, fair value adjustment made to the Thames Water Group's borrowings on acquisition by Kemble Water consortium; includes relevant derivative financial liabilities related solely to accretion on index-linked swaps and the effect of movement in foreign exchange rate to cross currency swaps.

A summary of the Group's net debt (covenant basis) by different types of debt is as follows:

	2022 £m	2021 £m
Securitised Class A debt	(12,172.2)	(11,390.1)
Securitised Class B debt	(1,599.7)	(1,543.3)
Holding company level debt	(1,479.9)	(1,479.9)
Cash net of covenant cash adjustment	678.4	784.1
Lease liability	(63.3)	(60.4)
Net debt (covenant basis)	(14,636.7)	(13,689.6)

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Reconciliation of liabilities arising from financing activities

The reconciliation below between the opening and closing balances for liabilities arising from financing activities evaluates changes in liabilities including both changes arising from cash flow and non-cash changes.

	2022			2021		
	Borrowings £m	Net derivative financial liabilities £m	Lease liabilities £m	Borrowings £m	Net derivative financial liabilities £m	Lease liabilities £m
Opening balance	(21,338.0)	(1,306.5)	(60.4)	(20,721.6)	(686.6)	(70.3)
Non-current	(20,191.9)	(1,318.8)	(52.9)	(18,906.7)	(671.6)	(62.4)
Current	(1,146.1)	12.3	(7.5)	(1,814.9)	(15.0)	(7.9)
Cash flows						
New loans raised	(3,585.4)	-	-	(2,071.6)	-	-
Repayment of borrowings	3,321.5	-	-	1,981.0	-	-
Repayment of lease principal	-	-	9.9	-	-	11.4
Derivative settlement ¹	-	(20.6)	-	-	15.3	-
Interest paid ²	669.8	-	-	445.9	-	-
Interest received ³	-	(108.9)	-	-	(176.6)	-
	405.9	(129.5)	9.9	355.3	(161.3)	11.4
Non-cash changes						
Interest accrued / Fees amortised	(1,147.6)	108.5	-	(1,098.0)	171.8	-
Foreign exchange movement	(42.3)	-	-	145.8	-	-
Accretion	(229.6)	-	-	(50.2)	-	-
Unamortised IFRS 9 transition adjustment	0.7	-	-	0.7	-	-
Lease additions	-	-	(9.6)	-	-	1.9
Interest accrued on IFRS 16 leases	-	-	(3.2)	-	-	(3.4)
Fair value changes	-	(822.1)	-	-	(630.4)	-
Fair value amortisation	10.4	-	-	30.0	-	-
	(1,408.4)	(713.6)	(12.8)	(971.7)	(458.6)	(1.5)
Closing balance	(22,340.5)	(2,149.6)	(63.3)	(21,338.0)	(1,306.5)	(60.4)
Non-current	(21,453.4)	(2,069.5)	(57.1)	(20,191.9)	(1,318.8)	(52.9)
Current	(887.1)	(80.1)	(6.2)	(1,146.1)	12.3	(7.5)

¹ Derivative settlement of £20.6 million, a cash inflow, relates to settlement of cross currency swaps. £15.3 million, a cash outflow in prior year, relates to index-linked swaps where accretion is payable periodically.

² Interest paid of £ 669.8 million (2021: £445.9 million) includes £115.3 million of capitalised borrowing costs (2021: £69.7 million) and excludes £ 0.2 million of bank charges (2021: £0.3 million).

³ Interest received of £108.9 million (2021: £176.6 million) excludes £0.6 million interest received on bank deposits (2021: £1.5 million) and £0.5 million other interest income (2021: £0.7 million).

Financial risk management

The Group's activities expose it to a number of financial risks: market risk (including interest rate risk, exchange rate risk and inflation risk), credit risk, and liquidity risk. Details of the nature of each of these risks along with the steps the Group has taken to manage them is described below and overleaf.

(a) Market risk

Market risk relates to fluctuations in external market variables such as interest rates, inflation and foreign exchange rates that could affect the Group's income or the value of the financial instruments it holds. Below is the effective interest rate and foreign currency risk profile of the debt held by the Group after taking into account the derivative financial instruments used to manage market risk:

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Financial risk management (continued)

(a) Market risk (continued)

As at 31 March 2022:	Total at fixed rates £m	Total at floating rates £m	Total at index linked rates £m	Total £m
Interest bearing loans and borrowings				
Net of corresponding swap assets				
- £ Sterling	9,759.3	739.3	7,748.3	18,246.9
Total	9,759.3	739.3	7,748.3	18,246.9

As at 31 March 2021:	Total at fixed rates £m	Total at floating rates £m	Total at index linked rates £m	Total £m
Interest bearing loans and borrowings				
Net of corresponding swap assets				
- £ Sterling	9,116.7	684.9	7,611.6	17,413.2
Total	9,116.7	684.9	7,611.6	17,413.2

The weighted average interest rates of the debt held by the Group, after taking into account the derivative financial instruments used to manage market risk, and the period until maturity for which the rate is fixed and index-linked, are given below:

	Weighted average interest rate		Weighted average period until maturity	
	2022	2021	2022	2021
	%	%	Years	Years
Fixed	5.8	6.2	11.2	12.1
Index-Linked	8.1	2.5	17.3	17.5

(i) Interest rate risk sensitivity analysis

The Group holds both fixed and floating rate borrowings. Fixed rate borrowings are exposed to a risk of change in their fair value due to changes in interest rates. Floating rate borrowings are exposed to a risk of change in interest cash flows due to changes in interest rates. The Group uses interest rate swaps which economically hedge future cash flows to protect against interest rate movements. For details of the interest rate swaps please see the Cash flow hedges section of this note on pages 89 and 90.

The table below summarises the impact, on pre-tax profits, of a 1 % increase or decrease in GBP interest rates at 31 March 2022. This analysis considers the effect on the fair value of derivative instruments and assumes that all other variables, in particular exchange rates and inflation expectations, remain constant.

	2022		2021	
	+1%	-1%	+1%	-1%
	£m	£m	£m	£m
Profit	473.1	(556.9)	404.7	(478.7)
Equity	473.1	(556.9)	404.7	(478.7)

(ii) Exchange rate risk sensitivity analysis

The Group's foreign currency risk exposure results from debt raised in currencies other than sterling. The Group uses cross currency swaps to hedge the foreign currency exposure of bonds issued in a foreign currency. All hedges are undertaken for commercial reasons with the objective of minimising the impact of exchange rate fluctuations. The Group has no material unhedged monetary assets or liabilities denominated in a currency other than sterling.

The table below summarises the impact of changes in the year end valuations of financial assets and liabilities denominated in foreign currency on pre-tax profits of a 10% strengthening or weakening of GBP (£) against the respective currencies in which the financial assets and liabilities are denominated at 31 March 2022. This analysis assumes that all other variables in the valuation remain constant.

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Financial risk management (continued)

(a) Market risk (continued)

	2022		2021	
	-10%	+10%	-10%	+10%
	£m	£m	£m	£m
Profit	(25.6)	(11.2)	(22.2)	(3.9)
Equity	(25.6)	(11.2)	(22.2)	(3.9)

(iii) Inflation risk sensitivity analysis

The Group has entered into financial instruments that are directly linked to inflation including RPI linked bonds, loans and swaps. In addition, the Group as a regulated water and wastewater Group is subject to fluctuations in its revenues due to movements in inflation. Therefore the Group's RPI linked borrowings and swaps form a partial economic hedge as the assets and liabilities partially offset.

The table below summarises the impact on pre-tax profits of a 1% increase or decrease in inflation rates at 31 March 2022. This analysis assumes that all other variables, in particular exchange rates, remain constant.

	2022		2021	
	+1%	-1%	+1%	-1%
	£m	£m	£m	£m
Profit	(911.0)	771.0	(881.3)	768.0
Equity	(911.0)	771.0	(881.3)	768.0

(b) Credit risk

Credit risk relates to the potential financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. This arises principally from the Group's trade receivables, insurance receivables, short-term investments and cash flows receivable from counterparties to the derivative financial instruments.

The Group has a statutory obligation to provide water and sewerage services to customers within its region. Due to the large area served by the Group and the significant number of households within this area, there is considered to be no concentration of trade receivables credit risk, however, the Group's credit control policies and procedures are in place to minimise the risk of bad debt arising from its household trade receivables. Amounts provided against trade receivables and movements in the provision in the year are disclosed in note 16. For non-household customers, the Group's credit risk lies with a small number of retailers rather than the end user and exposure to retailer default would be limited due to regulatory conditions that exist within the non-household market which aim to mitigate risks in relation to wholesaler creditworthiness.

Under the terms of the WBS agreement, counterparties to the Group's short-term investments and derivative transactions have to meet minimum credit rating criteria as assigned by both Moody's and S&P. For derivative counterparties there is a mechanism for the counterparty to post collateral when the counterparty fails to meet the necessary credit rating criteria and amounts due to the Group under outstanding derivative contracts exceed a contractually agreed threshold amount.

The Group's maximum exposure to credit risk is the carrying amount of financial assets recorded in the financial statements, which is net of impairment losses, less collateral held under the terms of the whole business securitisation agreement. During the year ended 31 March 2022, no collateral was held (2021: £nil).

The following table summarises amounts held on cash at bank and in hand and money market funds by credit rating of counterparties.

	2022 £m	2021 £m
AAA	685.0	800.4
A	17.5	6.4
Total	702.5	806.8

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Financial risk management (continued)

(b) Credit risk (continued)

Note: funds held in AAAmf, AAAM or AAAMmf rated money market funds are categorised as AAA in line with the fund rating, although the assets in these money market funds may have a lower rating.

The following table summarises fair value of derivative assets by credit rating of counterparties.

	2022 £m	2021 £m
AA-	27.8	15.6
A+	147.0	139.2
A	17.3	8.6
Total	192.1	163.4

(c) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group manages long-term liquidity by maintaining continuity of funding through access to different markets and debt instruments, raising funds in the capital markets and ensuring that manageable debt maturity profiles are maintained. The Group also maintains a level of committed liquidity facilities provided by a range of financial institutions. Details of the nature and management of the Group's liquidity risk is provided on page 18.

The maturity profile of interest-bearing loans and borrowings disclosed in the statement of financial position are given below.

	2022 £m	2021 £m
Within one year	705.2	954.1
Between one and two years	1,653.9	327.0
Between two and three years	822.7	1,928.2
Between three and four years	1,174.9	794.7
Between four and five years	1,274.7	1,339.6
After more than five years	12,181.5	11,937.2
Total	17,812.9	17,280.8

(i) Cash flows from non-derivative financial liabilities

The maturity profile of the anticipated future cash flows including interest in relation to the Group's non-derivative financial liabilities on an undiscounted basis (excluding non-current trade payables), which, therefore, differs from both the carrying value disclosed in the statement of financial position and fair values, is as follows:

Undiscounted amounts payable	2022 £m	2021 £m
Within one year	(1,856.1)	(2,056.1)
Between one and two years	(2,154.2)	(794.5)
Between two and three years	(1,283.6)	(2,408.7)
Between three and four years	(1,808.3)	(1,229.9)
Between four and five years	(1,457.0)	(1,771.7)
After more than five years	(24,348.6)	(22,614.1)
Total	(32,907.8)	(30,875.0)

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Financial risk management (continued)

(c) Liquidity risk (continued)

(ii) Cash flows from derivative financial instruments

The maturity profile of the Group's financial derivatives (which include interest rate swaps, cross currency swaps and index-linked swaps), based on undiscounted cash flows, is as follows:

Undiscounted amounts payable	2022 £m	2021 £m
Within one year	41.2	135.1
Between one and two years	(60.6)	58.5
Between two and three years	(226.6)	(45.3)
Between three and four years	50.0	(124.4)
Between four and five years	85.7	59.2
After more than five years	(2,272.6)	(1,584.4)
Total	(2,382.9)	(1,501.3)

Cash flow hedges

The Group has designated a number of contracts which qualify, in accordance with IFRS 9: Financial Instruments, as cash flow hedges. The accounting policy on cash flow hedges is explained on page 53.

In mid-2014 the Group executed £2.25 billion of forward-starting floating to fixed interest rate swaps of a 5-7 year maturity with various financial institutions to fix the future interest costs of an element of the new debt to be issued from 2017 to 2020. As at 31 March 2022, all forward-starting floating to fixed interest rate swaps have commenced. As the relevant debt has been issued, cash flow hedging has been discontinued prospectively and the amount outstanding on the cash flow hedge reserve is being recycled to the income statement over the relevant hedging period.

During the year, £31.1 million (2021: £37.5 million) was recycled from the cash flow hedge reserve to the income statement, see "Statement of changes in equity" on page 40. The amount recycled of £31.1 million related to the phased release of cash flow hedge reserve where the related debt has been issued and has not matured.

The Group's cash flow hedge reserve disclosed on the statement of changes in equity on page 40 relate to forward starting interest rate swaps which have now commenced.

	£m
At 1 April 2020	(90.2)
Loss on cash flow hedges	-
Cash flow hedges transferred to income statement	37.5
Deferred tax charge on cash flow hedges	(7.1)
At 31 March 2021	(59.8)
Loss on cash flow hedges	-
Cash flow hedges transferred to income statement	31.1
Deferred tax charge on cash flow hedges including impact of tax rate change	(4.5)
At 31 March 2022	(33.2)

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Cash flow hedges (continued)

Following are the effects of forward starting interest rate swaps which have commenced on the Group's financial position and performance:

As at 31 March	2022 £m	2021 £m
<i>Quantitative</i>		
Cash flow hedges transferred to income statement	31.1	37.5
As at 31 March	2022	2021
<i>Qualitative</i>		
Line item affected in income statement due to reclassification	Net losses on financial instruments	Net (losses)/gains on financial instruments

The table below shows phasing of amounts to be reclassified to income statement from the cash flow hedge reserve, which relates to the Group's forward starting interest rate swaps which have commenced:

As at 31 March	2022 £m	2021 £m
<i>Interest rate swaps</i>		
Within one year	(21.1)	(31.1)
Between one and two years	(18.7)	(21.1)
Between two and three years	(2.8)	(18.7)
Between three and four years	-	(2.8)
Between four and five years	-	-
After more than five years	-	-
Total	(42.6)	(73.7)

Offsetting financial assets and financial liabilities

Financial assets and liabilities are offset and the net amount is reported in the consolidated statement of financial position where KWF Group currently has a legally enforceable right to offset the recognised amounts, and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

KWF Group has entered into arrangements that allow for the related amounts to be set off in certain circumstances, such as an early termination event for derivative transactions.

The following table presents the recognised financial instruments that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset in the financial statements, as at 31 March 2022 and 31 March 2021. The column 'net amounts' shows the impact on the consolidated statement of financial position if circumstances arose for set-off rights to be applied.

Notes to the Group financial statements (continued)

20. Financial instruments (continued)

Offsetting financial assets and financial liabilities (continued)

Effects of offsetting on the Consolidated statement of financial position

As at 31 March 2022	Gross amounts £m	Amounts set off £m	Net amounts presented on consolidated statement of financial position £m	Impact of master netting arrangements £m	Net amounts £m
Financial assets					
Derivative financial instruments	192.1	-	192.1	(126.8)	65.3
	192.1	-	192.1	(126.8)	65.3
Financial liabilities					
Derivative financial instruments	(2,341.7)	-	(2,341.7)	126.8	(2,214.9)
	(2,341.7)	-	(2,341.7)	126.8	(2,214.9)
Total	(2,149.6)	-	(2,149.6)	-	(2,149.6)

As at 31 March 2021

Financial assets					
Derivative financial instruments	163.4	-	163.4	(131.6)	31.8
	163.4	-	163.4	(131.6)	31.8
Financial liabilities					
Derivative financial instruments	(1,469.9)	-	(1,469.9)	131.6	(1,338.3)
	(1,469.9)	-	(1,469.9)	131.6	(1,338.3)
Total	(1,306.5)	-	(1,306.5)	-	(1,306.5)

IBOR reform

The following table contains details of all of the financial instruments that the Group holds at 31 March 2022 with an interest rate linked to GBP LIBOR which have not yet transitioned to SONIA or an alternative interest rate benchmark:

	Carrying Value at 31 March 2022		Of which: Have yet to transition to an alternative benchmark interest rate as at 31 March 2022	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Assets and liabilities exposed to GBP LIBOR				
<i>Fair value through profit or loss</i>				
Derivative financial instruments				
Index-linked swaps ¹	-	(199.8)	-	(199.8)
<i>Amortised cost</i>				
Borrowings ²	-	(893.8)	-	(893.8)
Total assets and liabilities exposed to GBP LIBOR	-	(1,093.6)	-	(1,093.6)

¹ Consists of £199.8 million index-linked swaps (in a fair value liability position) where the interest rate is not directly linked to LIBOR, however have LIBOR references in the documentation.

² Included in the £893.8 million of borrowings in the table above are amounts relating to external debt where the interest rate is not directly linked to LIBOR, however has LIBOR references in the documentation. No gain or loss was recognised on transition as the Phase 2 reliefs were met.

Notes to the Group financial statements (continued)

21. Deferred tax

An analysis of movements in the major deferred tax liabilities and assets recognised by the Group is set out below:

	Accelerated tax depreciation £m	Retirement benefit obligations £m	Cash flow hedges £m	Other £m	Total £m
At 31 March 2020	(1,297.2)	8.0	114.2	54.2	(1,120.8)
Credited/(charged) to income statement	(22.6)	(17.4)	89.9	1.2	51.1
Credited/(charged) to other comprehensive income	-	43.2	(7.1)	-	36.1
At 31 March 2021	(1,319.8)	33.8	197.0	55.4	(1,033.6)
(Charged)/credited to income statement including impact of tax rate change	(315.7)	(14.8)	200.8	0.6	(129.1)
Credited/(charged) to other comprehensive income including impact of tax rate change ¹	-	42.9	(4.5)	-	38.4
Other	0.1	-	-	-	0.1
At 31 March 2022	(1,635.4)	61.9	393.3	56.0	(1,124.2)

¹ The credit of £42.9 million to other comprehensive income in respect of retirement benefits comprises a credit of £11.8 million on the net actuarial loss in the year and a credit of £31.1 million for the impact of the tax rate change in the year. The charge of £4.5 million to other comprehensive income in respect of the cash flow hedge reserve comprises a charge of £5.8 million on the cash flow hedge transferred to income statement less a credit of £1.3 million for the impact of the tax rate change in the year.

In the Spring Budget 2021, the UK Government announced that from 1 April 2023 the corporation tax rate would increase from 19% to 25%. This new law was substantively enacted on 24 May 2021. Deferred taxes at the balance sheet date have been measured using these enacted tax rates and are reflected in these financial statements, except for deferred tax on timing differences which are expected to unwind by 31 March 2023 which continues to be provided at the current rate of 19%, and except for the deferred tax liability on the surplus on the TWMIIPS pension scheme which continues to be provided at 35%, being the tax rate which would apply if the surplus were to be refunded to the Group. The impact of the rate change affects deferred tax amounts in the income statement and in other comprehensive income.

A deferred tax liability arises in respect of accelerated tax depreciation because the rate of tax relief specified in UK tax legislation on most of our capital expenditure is quicker than the rate of accounting depreciation on that expenditure. These temporary differences unwind and affect current tax over the life of the relevant assets, but the continued high levels of capital investment within TWUL mean that the temporary differences currently tend to increase every year.

Deferred tax assets have arisen on the following temporary differences:

- Retirement benefit obligations: A net deferred tax asset is provided on the retirement benefit obligations booked in the financial statements. The £61.9 million deferred tax asset at 31 March 2022 is the net of an asset of £64.3 million (25% of the deficit on the TWPS pension scheme of £257.3 million) less a liability of £4.2 million (35% of the surplus on the TWMIIPS pension scheme of £12.0 million) and an asset of £1.8m (on the SUURBS deficit of £7.2m at a mixture of 19% and 25%). Current tax relief will be available in the future for pension contributions paid to reduce these obligations. Deferred tax movements will also arise on any non-cash changes in the obligations, for example those arising from actuarial valuations.
- Cash flow hedges: A deferred tax asset is provided on certain fair values booked in respect of financial instruments in the financial statements. Current tax relief will be available in the future as the cash flows arise over the lives of the derivatives. Deferred tax movements will also arise on any non-cash changes in the fair value of the derivatives.
- Other: A deferred tax asset is provided on the temporary differences arising on amounts for which a tax deduction is spread over a number of years in accordance with tax legislation, including certain pension contributions. Current tax relief will be available in future when tax relief is available in accordance with the legislation. A deferred tax asset is also provided on fair values on loans booked on consolidation; there will be no current tax impact in future but deferred tax charges will arise as these fair values are amortised in the financial statements.

Deferred tax assets and liabilities have been offset. The offset amounts, which are to be recovered / settled after more than 12 months are as follows:

	2022 £m	2021 £m
Deferred tax assets	511.2	286.2
Deferred tax liabilities	(1,635.4)	(1,319.8)
Net deferred tax liabilities	(1,124.2)	(1,033.6)

In addition, the Group has unrecognised deferred tax assets, primarily in respect of interest payable, on which no tax relief has been claimed to date and for which the Group does not anticipate tax relief in the future. The amount of deferred tax assets not recognised at 25% (2021: 19%) is as shown overleaf:

Notes to the Group financial statements (continued)

21. Deferred tax (continued)

	2022 £m	2021 £m
Deferred tax asset not recognised in respect of tax losses	8.5	7.2
Deferred tax asset not recognised in respect of restricted interest expenses	54.9	-
Total	63.4	7.2

22. Provisions for liabilities and charges

	Insured liabilities £m	Capital Infrastructure provision £m	Dilapidations £m	Environmental and legal provisions £m	Other provisions £m	Total £m
At 1 April 2021	71.1	16.1	11.4	22.9	23.5	145.0
Utilised during the period	(24.8)	(2.9)	(0.2)	(11.1)	(1.6)	(40.6)
Additional provisions recognised	28.5	-	0.5	41.8	21.6	92.4
Unused amounts reversed	1.1	0.5	(0.4)	-	(11.7)	(10.5)
At 31 March 2022	75.9	13.7	11.3	53.6	31.8	186.3

The insured liability provision arises from claims for which insurance is in place, including actual claims from third parties received by the Group and incidents incurred but without claims received. These amounts provided for represent the estimated cost of settlement. Where we have insurance cover for claims, we recognise the assessed reimbursement value from third party insurance companies net of retentions. The receivable is disclosed in note 16. Timing of settlement for these claims is uncertain and therefore amounts provided have been classified as non-current.

The capital infrastructure provision is to cover various potential third party costs, including compensation claims, arising from the construction of infrastructure assets. Due to the uncertain timing of these costs, the Group considers it appropriate to classify these as non-current.

Dilapidations relate to our legal obligation to return several leased offices, industrial units and laboratories back to their pre-leased state. The estimate of this cost has been informed by our outsourced property advisor. There have been no additional sites to consider under this provision during the current financial year.

Environmental and other legal provisions relate to legal claims including environmental and commercial matters. Environmental matters are in relation to the Group's obligations under its Instrument of Appointment, the Water Industry Act 1991 and the Environmental Permitting Regulations 2016. During the current financial year, there has been an additional charge of £41.8 million recognised, this represents a reassessment of historic provisions and new provisions recorded during the period.

Other provisions relate to other claims and regulatory obligations of the Group. The amount recorded represents management's best estimate of the value to settle the obligations. Unused amounts reversed relate to previously recognised provisions which were reassessed during the year and it was concluded there is no longer an obligation for these.

The Group needs to determine the merit of any litigation and the chances of a claim successfully being made, the likelihood and the ability to reliably estimate an outflow of economic benefits occurring and whether there is a need to disclose a contingent liability or whether a provision is required based on this assessment.

There are claims against the Group arising in the normal course of business, which are in the process of negotiation. Judgement is required in measuring and recognising provisions related to pending litigation or other outstanding claims that are subject to negotiated settlement or Court assessment. This includes evaluating the likelihood that an outstanding claim will succeed and to quantify the possible range of any financial settlement and outflow of economic benefits. There is a risk that the final outcome of legal claims could be materially different to amounts provided.

The Group has also taken the option under paragraph 92 of IAS 37 for non-disclosure of certain information relating to provisions and contingent liabilities in extremely rare cases where this can be expected to seriously prejudice the entity in a dispute.

Notes to the Group financial statements (continued)

23. Share capital and other reserves

Called up share capital

	2022 £m	2021 £m
<i>Authorised, allotted, called-up and fully paid:</i>		
1,000,001 (2021: 1,000,001) ordinary shares of £1 each	1.0	1.0

The Group has one class of ordinary share which carries no right to fixed income. The holders of ordinary shares are entitled to receive dividends as declared and are entitled to one vote per share at meetings of the Group.

Other reserves

	2022 £m	2021 £m
Cash flow hedge reserve	(33.2)	(59.8)
Accumulated losses	(6,621.9)	(4,992.6)
Total	(6,655.1)	(5,052.4)

The cash flow hedge reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred.

Notes to the Group financial statements (continued)

24. Retirement benefit obligations

Background

The Group operates four material pension schemes, one of which is a defined contribution scheme and the other three are defined benefit schemes.

	What are they?	How do they impact the Group's financial statements?
Defined Contribution Scheme		
<p>This scheme was set up in April 2011 and was managed through Standard Life. From October 2020, this is now managed through Aon MasterTrust. This scheme is open to all employees of the Group that are not members of the defined benefit pension schemes.</p>	<p>In a defined contribution pension scheme the benefits are linked to:</p> <ul style="list-style-type: none"> • contributions paid; • the performance of the individual's chosen investments; and • the form of benefits 	<p>A charge of £27.1 million (2021: £15.2 million) was recognised in the income statement relating to the contributions payable by the Group based upon a fixed percentage of employees' pay.</p> <p>There were £3.5 million (2021: £nil) outstanding contributions at the year-end recognised in the statement of financial position.</p> <p>The Group has no exposure to investment or other experience risks.</p>
Defined Benefit Schemes		
<p>Defined benefit arrangements for the Group's eligible employees are provided through three defined benefit pension schemes:</p> <ul style="list-style-type: none"> • Thames Water Mirror Image Pension Scheme ("TWMIPS"). Thames Water Pension Scheme ("TWPS"); • Thames Water Mirror Image Pension Scheme ("TWMIPS"); and • The SUURBS Arrangement ("SUURBS"). <p>The SUURBS Arrangement provides retirement benefits to a previous director, and their spouse, of Thames Water Limited, a subsidiary entity in the Group. The scheme is an unfunded arrangement but is secured against assets held by Thames Water Limited ("TWL")</p> <p>Both now are career average pension schemes. Their assets are held separately from the rest of the Kemble Water Holdings Limited Group in funds in the United Kingdom which are independently administered by the pension trustees. TWMIPS has been closed to new entrants since 1989 and TWPS since April 2011. New entrants now join the defined contribution scheme. One scheme was closed to future accrual as of 31 March 2021.</p>	<p>In a defined benefit pension scheme the benefits:</p> <ul style="list-style-type: none"> • are defined by the scheme rules • depend on a number of factors including age, years of service and pensionable pay; and • do not depend on contributions made by the members or the Group 	<p>A charge was recognised in the income statement of £8.8 million (2021: £26.5 million) relating to the following:</p> <ul style="list-style-type: none"> • service cost representing the increase in the defined benefit liability arising from pension benefits earned by active members in the current period; • administrative expenses for the pension schemes; • the net interest expense on pension scheme assets and liabilities; and • the effect of restriction in the surplus. <p>An actuarial loss of £22.9 million (2021: loss of £195.6 million) on the value of the pension scheme was recognised in the statement of other comprehensive income. This reflects the impact of changes in financial assumptions and the demographic of the scheme members when compared with those at the start of the year, as well as the return on the schemes' assets over and above the amount included in the net interest expense.</p> <p>A pension asset of £12.0 million (2021: £57.9 million) is recognised in the statement of financial position for the TWMIPS scheme. A pension deficit of £257.3 million (2021: £277.1 million) is recognised in the statement of financial position for the TWPS scheme. A pension deficit of £7.2 million (2021: deficit of £7.6 million) is recognised in the statement of financial position for the SUURBS scheme. As at 31 March 2022, the net pension deficit is £252.5 million (2021: £226.8 million).</p> <p>The Group is exposed to investment and other experience risks. Where it is estimated that the benefits will not be met by regular contributions, assets held or expected investment income, additional contributions are being made by the Group.</p>

In addition to the cost of the defined benefit pension arrangements, the Group operates arrangements under which it augments benefits on retirement in certain cases of redundancy. These augmentations are funded by way of additional employer contributions to the schemes. In the year to 31 March 2022 these related payments amounted to £nil (2021: £0.2 million).

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

The defined benefit pension schemes are subject to a full actuarial valuation every three years using assumptions agreed between the trustees of the pension schemes and the Group. The purpose of this triennial valuation is to evaluate and, if necessary, modify the funding plans of the pension schemes to ensure the schemes have sufficient funds to meet future benefit payments. The most recent full actuarial valuation of the defined benefit pension scheme was carried out at 31 March 2019 on behalf of the pension trustees by David Gardiner of Aon, the actuary of the schemes. This resulted in a combined funding deficit across the two schemes of £148.9 million (2016: £364.9 million) with the market value of the assets being £2,313.3 million (2016: £1,905.5 million). The next triennial valuation based on the 31 March 2022 position is currently under progress. Under UK regulations, the Group has 15 months to complete the triennial valuation from the valuation date of 31 March 2022.

This triennial funding valuation is different from the accounting valuation presented in the financial statements due to the use of different assumptions and changes in market conditions from 31 March 2019 to 31 March 2022. The 2019 funding valuation had been updated to an accounting valuation as at 31 March 2022 by Hymans Robertson LLP, an independent and professionally qualified consulting actuary, using revised assumptions that are consistent with the requirements of IAS 19 *Employee Benefits* and shown in this note to the financial statements.

Amounts included in the financial statements in respect of the defined benefit pension schemes

Income Statement

The amounts recognised in the income statement with respect to the defined benefit pension schemes are detailed below:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
Current service cost	-	1.5	-	19.0	1.5	-
Past service cost including curtailments	-	-	-	0.4	0.1	-
Scheme administration expenses	1.3	1.2	-	1.8	1.6	-
Net interest cost/(income)	5.8	(1.1)	0.1	4.1	(2.2)	0.2
Total	7.1	1.6	0.1	25.3	1.0	0.2

The net expense is recognised in the following captions within the income statement:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
Operating expenses	1.3	2.7	-	21.2	3.2	-
Net finance expense/(income)	5.8	(1.1)	0.1	4.1	(2.2)	0.2
Total	7.1	1.6	0.1	25.3	1.0	0.2

Statement of other comprehensive income

Actuarial gains and losses on the defined benefit schemes have been recognised within other comprehensive income. An analysis of the amount presented is set out below:

	2022 £m	2021 £m
Cumulative actuarial gains recognised at 1 April	(521.8)	(326.2)
Actual return less expected return on pension scheme assets	(122.4)	32.4
Experience (loss)/gain arising on scheme liabilities	(84.6)	100.8
Gain/(loss) arising due to change in assumptions	179.4	(341.8)
Gain arising due to change in demographic assumption	4.7	13.0
Total actuarial loss	(22.9)	(195.6)
Cumulative actuarial losses recognised at 31 March	(544.7)	(521.8)

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

Amounts included in the financial statements in respect of the defined benefit pension schemes (continued)

Statement of financial position

The net pension liability recognised within the statement of financial position is as follows:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
Fair value of scheme assets	1,640.1	698.7	-	1,730.9	770.9	-
Present value of defined benefit obligations	(1,897.4)	(686.7)	(7.2)	(2,008.0)	(713.0)	(7.6)
(Deficit)/surplus	(257.3)	12.0	(7.2)	(277.1)	57.9	(7.6)
Net pension deficit			(252.5)			(226.8)

Reconciliation of defined benefit plan assets and liabilities

The movement in the present value of the defined benefit obligations were as follows:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
At 1 April	2,008.0	713.0	7.6	1,804.4	711.3	7.0
Current service cost	-	1.5	-	19.0	1.5	-
Past service cost including curtailments	-	-	-	0.4	0.1	-
Interest cost	41.6	13.9	0.1	41.8	16.2	0.2
Contributions from scheme members	-	-	-	0.1	-	-
Benefits paid	(55.2)	(39.2)	(0.4)	(56.0)	(45.4)	(0.4)
Termination benefits	-	-	-	0.2	-	-
Actuarial (gains)/losses	(97.0)	(2.5)	(0.1)	198.1	29.3	0.8
At 31 March	1,897.4	686.7	7.2	2,008.0	713.0	7.6

The movements in the fair value of scheme assets were as follows:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
At 1 April	1,730.9	770.9	-	1,595.3	805.8	-
Interest income on scheme assets	35.8	15.0	-	37.7	18.4	-
Contributions by sponsoring employers	3.4	2.1	-	114.4	2.3	-
Contributions from scheme members	-	-	-	0.1	-	-
Administration costs paid from scheme assets	(1.3)	(1.2)	-	(1.8)	(1.6)	-
Benefits paid	(55.2)	(39.2)	-	(56.0)	(45.4)	-
Contributions for termination benefits	-	-	-	0.2	-	-
(Losses)/gains on assets above interest	(73.5)	(48.9)	-	41.0	(8.6)	-
At 31 March	1,640.1	698.7	-	1,730.9	770.9	-

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

Analysis of assets

	2022				2021			
	Quoted £m	Unquoted £m	Total £m	Total (%)	Quoted £m	Unquoted £m	Total £m	Total (%)
Equities								
UK	41.7	-	41.7	1.8	36.8	-	36.8	1.5
Rest of World	422.2	-	422.2	18.0	486.3	-	486.3	19.4
Bonds								
Government – UK	72.3	-	72.3	3.1	25.6	-	25.6	1.0
Government – Rest of World	101.8	-	101.8	4.4	92.0	-	92.0	3.7
Corporates – UK	49.6	-	49.6	2.1	50.3	0.2	50.5	2.0
Corporates – Rest of World	256.8	-	256.8	11.0	277.2	1.4	278.6	11.1
Property								
UK	-	-	-	-	7.1	-	7.1	0.3
Rest of world	-	-	-	-	1.1	-	1.1	-
Alternative assets								
Liability driven instruments	1,140.9	-	1,140.9	48.7	1,297.8	-	1,297.8	51.9
Other (including derivatives)	155.7	-	155.7	6.7	86.5	-	86.5	3.5
Cash	97.8	-	97.8	4.2	139.5	-	139.5	5.6
Total market value of assets	2,338.8	-	2,338.8	100.0	2,500.2	1.6	2,501.8	100.0

The assets of the defined benefit schemes do not include any directly held shares issued by the Group or property occupied by the Group.

The Pension Trustees determine the investment strategy of the defined benefit pension schemes after taking advice from their investment advisor, Redington. 51.9% of the scheme assets are invested in Liability Driven Investment (“LDI”) portfolios managed by Schroder Investment Management Limited. These use government bonds and derivative instruments such as interest rate swaps, inflation swaps and gilt repurchase transactions to hedge the impact of interest rate and inflation movements on the long-term liabilities of the schemes.

Under the LDI strategies, if interest rates fall the value of investments rises to help match the increase in actuarial liabilities arising from the resulting fall in discount rate. Similarly, if interest rates rise, the value of the LDI investments will fall, as will the liabilities, as a result of the increase in the discount rate. Interest rates and inflation risks are not fully matched by the LDI portfolios, representing the residual interest rate and inflation risk to which the schemes remain exposed.

In the current period, Index Linked Gilts amount to £532.7 million and Fixed Interest Gilts amount to £1,493.0 million of the LDI total.

The credit risk arising on the derivatives held in the LDI mandate depends on whether the derivative is traded on an exchange or over the counter (“OTC”). OTC derivative contracts are not guaranteed by any regulated exchange and therefore the schemes are subject to risk of failure of the counterparty. The credit risk for OTC swaps held in the LDI portfolio is reduced by collateral arrangements and the counterparty exposure of each scheme is appropriately diversified.

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

IAS 19 Assumptions

The approach used to set the IAS 19 assumptions is detailed below:

	Approach to set the assumptions
Discount rate	As per IAS 19, the discount rate is determined using the market yields on high quality corporate bonds as at the reporting date with the currency and term of these bonds being consistent with the currency and term of the pension liabilities. The TWPS and TWMIPS discount rate is calculated by applying the projected cash flows of these schemes to an AA-corporate bond yield curve as at 31 March 2022.
RPI inflation	The RPI inflation assumption uses the inflation curve weighted by projected future cash flows of TWPS and TWMIPS with an adjustment made for an inflation risk premium.
CPI inflation	This CPI inflation assumption is taken at a margin below RPI factoring in market forces and third party estimates of the difference expected.
Salary increases	Both defined benefit schemes provide benefits on a Career Average ("CARE") benefit structure whereby past entitlements are linked to movements in CPI therefore an assumption for increase in salary is not required.
Pension increases	It is assumed that benefits will increase in line with the RPI and CPI inflation assumptions detailed above, based on the appropriate index for increasing benefits.
Longevity	The mortality assumptions are based on standard mortality tables and the recent actual mortality experience of members within the schemes. The assumptions also allow for future improvements to mortality rates.

Financial assumptions

The main assumptions used in the valuation of these schemes are as follows:

	2022			2021		
	TWPS	TWMIPS	SUURBS	TWPS	TWMIPS	SUURBS
Price inflation – RPI	3.65%	3.85%	3.85%	3.25%	3.30%	3.30%
Price inflation – CPI (Pre 2030)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Price inflation – CPI (Post 2030)	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Rate of increase to pensions in payment – RPI	3.65%	3.65%	3.65%	3.25%	3.30%	3.30%
Rate of increase to pensions in payment – CPI (Pre 2030)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Rate of increase to pensions payment – CPI (Post 2030)	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Discount rate	2.75%	2.75%	2.75%	2.10%	2.00%	2.00%

Mortality assumptions

The mortality assumptions were based on the post retirement mortality assumptions used for the previous financial year, but updated for the latest CMI 2020 model. The table below illustrates the life expectancies of an average member retiring at age 60 at the year-end reporting data and a member reaching age 60 at the year-end reporting date in 20 years.

	2022		2021	
	TWPS Years	TWMIPS Years	TWPS Years	TWMIPS Years
<i>Life expectancy from age 60:</i>				
Male	27.7	26.8	27.6	26.8
Female	29.8	29.1	29.7	29.0
<i>Life expectancy from age 60 currently age 40:</i>				
Male	28.3	27.9	28.3	27.9
Female	30.9	30.2	30.8	30.2

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

Actuarial risk factors

The schemes are exposed to actuarial risks including investment risk, inflation risk and longevity risk.

	Definition of risk
Investment risk	Assumptions are made about the returns expected from the schemes' investments. If the investments underperform these assumptions in the long-term then additional contributions will need to be made to the schemes in order to fund the payment of future benefits.
Discount rate risk	A fall in AA-rated corporate bond yields, which are used to set the discount rate, will increase the value of the scheme's liabilities. This may be partially offset by an increase in the value of the scheme's bond holdings.
Inflation risk	The benefits payable to the members of the schemes are linked to inflation and as such higher inflation will lead to higher liabilities. Additionally, the Group's contributions to the schemes are based on assumptions about the future levels of inflation, therefore an increase in inflation above that assumed in the actuarial calculations will create a deficit.
Longevity risk	An increase in the life expectancy of scheme members will result in benefits being paid out for longer, leading to an increase in the defined benefit schemes' liabilities.

The sensitivity of the present value of scheme liabilities to changes in the principal assumptions used is set out below:

	2022			2021		
	TWPS £m	TWMIPS £m	SUURBS £m	TWPS £m	TWMIPS £m	SUURBS £m
Change in discount rate (+ 1% p.a.)	(345.0)	(85.0)	(0.7)	(360.0)	(90.0)	(0.7)
Change in rate of inflation (-1% p.a.)	(235.0)	(65.0)	(0.7)	(250.0)	(65.0)	(0.7)
Change in life expectancy (-1 year)	75.0	35.0	0.3	80.0	40.0	0.3

Future expected cash flows

The Group made a pension deficit repair payment of £69.7 million on 30 March 2021 covering the financial periods from 2021/22 to 2024/25, which was treated as an exceptional cash flow in the previous year. The Group made a payment of £28.3 million on 1 April 2020 in relation to 2020/21. The average duration of the benefit obligation at the end of the year is 19 years for TWPS and 13 years for TWMIPS (2021: 18 years for TWPS and 11 years for TWMIPS).

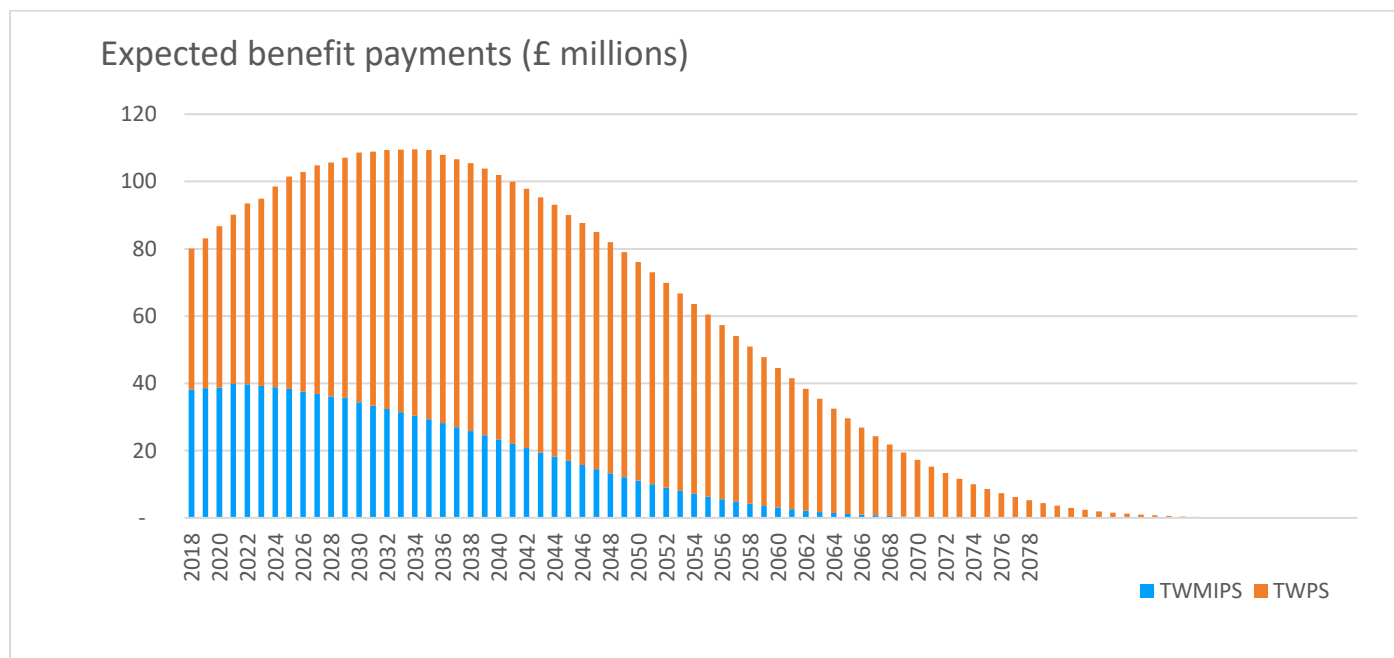
In December 2020, the funding valuation as at 31 March 2020 was finalised and agreed with the scheme Trustees and actuaries. In order to address the combined funding deficit the Group is scheduled to make future deficit repair payments in line with the table below:

Year to 31 March	2021	2022	2023	2024	2025	2026	2027
Deficit contribution (£m)	69.7	-	-	-	17.9	17.9	17.9

Notes to the Group financial statements (continued)

24. Retirement benefit obligations (continued)

The expected cash flows payable from the schemes are presented in the graph below:



The expected cash flows are undiscounted liability cash flows based on the funding valuation as at 31 March 2019. The future cash flows are sensitive to the assumptions used and therefore actual cash flows may differ from those expected.

25. Capital commitments

	2022 £m	2021 £m
Property, plant and equipment	652.8	404.9
Intangible assets	21.2	10.0
Contracted for but not provided	674.0	414.9

In addition to these commitments, the Group has long-term capital investment plans, under its business plan submitted to Ofwat, to provide for future growth and maintenance of the infrastructure network. Capital commitments have increased during the year due to more investment being made in our infrastructure to help mitigate the challenge of ensuring resilience in our network from the impact of climate change and population growth.

26. Contingent liabilities

Contingent liabilities represent potential future cash outflows which are either not probable or cannot be measured reliably.

The Group is currently defending five sets of court proceedings commenced by different groups of Property Search Companies ("PSCs") seeking refunds of fees paid for property search data, including CON29DW searches, from 1 December 2013 to date. The PSCs allege that they have been overcharged for drainage and water searches and that information should have been made available to them pursuant to the Environmental Information Regulations 2004, at a lower cost than that charged. The position is replicated across all other Water & Sewerage Companies in England and Wales. We are defending these claims, as are all the other water and sewage companies in England and Wales. However, the claims are at too early a stage to provide further commentary on the merits or otherwise of them or any effect on the financial position of the Group.

The Group is subject to investigations being separately led by Ofwat and the Environment Agency into compliance with conditions of environmental permits and sewer overflows. This impacts all Sewerage Companies in England and Wales per obligations set under Instruments of Appointment, the Water Industry Act 1991 and the Environmental Permitting Regulations 2016. The Group is providing information requested to support with these ongoing investigations. The outcome of these investigations and the existence of any possible future financial obligations, or other consequences, is unable to be determined at this time.

Other contingent liabilities include other contractual matters with suppliers incurred in the ordinary course of business, which may result in a liability that could have a material effect on the Group's financial statements. These contractual matters are unquantifiable and subject to significant uncertainties. The Group has considered these contractual matters as a contingent liability.

Notes to the Group financial statements (continued)

26. Contingent liabilities (continued)

Financial guarantees

The Group is part of a Whole Business Securitisation ("WBS") group as described in note 20. Companies in the WBS group raise debt in external debt markets through the issuance of secured bonds and the issue of loans. All companies in the WBS group guarantee the principal and interest payments due under the terms of the bonds. Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies within this group, the Group considers these to be insurance arrangements and accounts for them as such. In this respect, the Group treats the guarantee contract as a contingent liability until such a time as it becomes probable that the Group will be required to make a payment under the guarantee.

27. Off-balance sheet arrangements

The Group is party to a number of contractual arrangements for the purposes of its principal activities that are not required to be included within the statement of financial position. These are:

- leases not in the scope of IFRS 16;
- power prices forward contracts;
- outsourcing contracts; and
- guarantees.

In respect of outsourcing contracts, the Group has entered into various arrangements to outsource the provision of certain back-office and operational functions with third party providers. These outsourced arrangements include aspects of customer services, legal services, metering and capital delivery. These arrangements are on commercial terms and no associated penalty or termination clauses will have a material effect on the financial position of the Group.

The Group is part of a whole business securitisation group. Thames Water Utilities Holdings Limited, Thames Water Utilities Limited and its direct subsidiary, Thames Water Utilities Finance plc are Obligors under the whole business securitisation entered into in 2007. The Obligors have all entered into a Security Trust and Inter-creditor Deed ("STID"). Under this document each Obligor will guarantee the obligations of each other Obligor with their future cash flows. The guaranteed debt on a post swap basis as at 31 March 2022 was £13.8 billion (2021: £12.9 billion).

28. Guarantees

Thames Water Utilities Holdings Limited, Thames Water Utilities Limited and Thames Water Utilities Finance plc are Obligors under the whole business securitisation entered into in 2007. The Obligors have entered into a Security Trust and Inter-creditor Deed. Under this document each Obligor will guarantee the obligations of TWUL and TWUF. The guaranteed debt on a post swap basis at 31 March 2022 was £ 13.8 billion (2021: £12.9 billion).

At 31 March 2022 the Group has secured the overdrafts and loans of certain subsidiaries up to a maximum of £5.0 million (2021: £5.0 million). The Group has also guaranteed facilities for contract bonding on behalf of certain subsidiaries amounting to £0.8 million (2021: £0.8 million).

Kemble Water Finance Limited and its subsidiary, Thames Water (Kemble) Finance plc (the "Kemble Financing Group") have provided security by way of a debenture over each of their assets in relation to monies owed by the Kemble Financing Group under certain financing arrangements which accede from time to time as secured debt pursuant to an intercreditor agreement. Pursuant to the intercreditor agreement, Kemble Water Finance Limited also guarantees the obligations of its subsidiary, Thames Water (Kemble) Finance plc pursuant to any secured indebtedness it may raise. The total amount of debt outstanding at the Kemble Water Finance Limited level at 31 March 2022 amounts to £949.8 million (2021: £949.8 million). The total amount of guaranteed secured debt raised at the Thames Water (Kemble) Finance plc level outstanding at 31 March 2022 is £ 515.1 million (2021: £515.1 million).

Notes to the Group financial statements (continued)

29. Statement of cash flows

Reconciliation of operating profit to operating cash flows

	2022			2021		
	Underlying £m	BTL £m	Total £m	Underlying £m	BTL £m	Total £m
(Loss)/profit for the financial year	(1,718.0)	68.7	(1,649.3)	(831.3)	59.6	(771.7)
Less finance income	(121.0)	-	(121.0)	(174.7)	-	(174.7)
Add finance expense	1,269.1	-	1,269.1	1,061.6	-	1,061.6
Add interest paid on lease liability	3.2	-	3.2	3.4	-	3.4
Add net losses on fair value of financial instruments	895.5	-	895.5	524.9	-	524.9
Taxation on (loss)/profit on ordinary activities	(7.3)	16.1	8.8	(192.8)	14.0	(178.8)
Operating profit	321.5	84.8	406.3	391.1	73.6	464.7
Depreciation on property, plant and equipment	645.8	-	645.8	580.8	-	580.8
Impairment of property, plant and equipment	10.0	-	10.0	-	-	-
Depreciation on right of use assets	5.7	-	5.7	8.0	-	8.0
Amortisation of intangible assets	55.6	-	55.6	52.0	-	52.0
Loss on sale of property, plant and equipment	(1.4)	-	(1.4)	(8.3)	-	(8.3)
Difference between pension charge and cash contribution	(1.9)	-	(1.9)	(92.7)	-	(92.7)
(Decrease)/increase in inventory	1.9	-	1.9	(1.3)	-	(1.3)
Increase in trade and other receivables	(3.9)	(82.1)	(86.0)	12.3	(71.1)	(58.8)
Increase in contract assets	(11.5)	(2.7)	(14.2)	(4.6)	(4.3)	(8.9)
Increase/(decrease) in trade and other payables	51.1	1.7	52.8	(55.4)	1.0	(54.4)
Increase/(decrease) in contract liabilities	77.7	(0.1)	77.6	48.1	1.8	49.9
Group relief received	215.9	-	215.9	-	-	-
Increase/(decrease) in provisions	41.3	-	41.3	(0.6)	-	(0.6)
Cash generated from operations ¹	1,407.8	1.6	1,409.4	929.4	1.0	930.4

¹ Cash generated by operating activities for the year ended 31 March 2022 includes £nil (2021: £69.7 million of) payments that are considered to be exceptional. This exceptional outflow was related to the remaining pension deficit repayments covering AMP7 for the Thames Water Pension Scheme. Excluding this exceptional cash payment, underlying cash generated by operating activities would be £999.1 million for the year ended 31 March 2021. If this prepayment had not been made then the underlying cash generated by operating activities for the year ended 31 March 2022 would be £1,383.1 million, which would have included a cash payment of £24.7 million.

Non-cash transactions

No additions to property, plant and equipment during the year, or the immediately preceding year, were financed through new finance leases. Assets transferred from developers and customers for nil consideration were recognised at their fair value.

Movement in cash and cash equivalents

	2022 £m	2021 £m
Movement in cash	11.1	(12.4)
Movement in money market funds	(115.4)	300.0
Total	(104.3)	287.6

30. Ultimate parent company and controlling party

Kemble Water Eurobond plc, a company incorporated in the United Kingdom, is the immediate parent company. The Directors consider that Kemble Water Holdings Limited, a company incorporated in the United Kingdom, is the ultimate and controlling party and the only group in which the results of the Company are consolidated.

Copies of the financial statements of the above companies may be obtained from The Company Secretary's Office, Thames Water, Clearwater Court, Vastern Road, Reading, Berkshire, RG1 8DB.

Notes to the Group financial statements (continued)

31. Related party transactions

Key management personnel

Key management personnel comprise the members of the Board of Directors of the Company and the Board of Directors of the Group's principal trading subsidiary, Thames Water Utilities Limited, who have a direct impact on the Company's affairs during the year.

	2022 £'000	2021 £'000
Short term employee benefits	2,907.2	3,109.8
Post-employment benefits	173.9	159.0
Termination benefits	111.1	591.0
Other	728.5	457.0
Total	3,920.7	4,316.8

Other benefits includes medical benefits, car allowances and other incentives.

The Group's borrowings include a £100.0 million fixed rate note due 2025 with a book value of £98.9 million. The noteholder is OCM Credit Portfolio LP. OCM Credit Portfolio LP is a member of the Ontario Municipal Employees Retirement System ("OMERS") group which, via a separately managed group of companies within the OMERS group owns, indirectly, 31.8% of the Company. The terms of the notes, including the coupon payable, are the same market rates as all fixed rate notes issued by the Company in 2018 and due in 2025, a total of £310.0 million.

32. Post balance sheet events

On 29 June 2022, the Thames Water Utilities Limited Board approved an updated business plan which forecasts £11.5 billion (2017/18 real terms) of total expenditure over the current 5 year regulatory period. To support Thames Water Utilities Limited in the delivery of its business plan, shareholders have provided an Equity Commitment Letter where they have agreed to contribute, or cause to be contributed, an aggregate of £500 million in equity, available to be drawn in full by the Group in March 2023, alongside an Equity Support Letter which sets out further Shareholder support. This equity commitment of £500 million has been approved by shareholders' investment committees and is not subject to any performance-related conditions. Such funds, when drawn, are expected to be cascaded from Kemble Water Holdings Limited to Thames Water Utilities Limited via intermediate holding companies.

In April/May 2022, the Group further strengthened its financing position, through Thames Water Utilities Limited entering into a total of £300.0 million loan facilities, consisting of £150.0 million Class B due April 2029, £100.0 million Class A due May 2029 and £50.0 million Class B due August 2025. These facilities are currently undrawn. A £63.1 million Class A facility due March 2027 and £11.9 million of a Class A facility due March 2029 were repaid early in April 2022. £370.7 million Class B Revolving Credit Facilities were also repaid in April 2022. Since 31 March 2022, a total of £375.0 million has been drawn from the Class A Revolving Credit Facility.

Notes to the Company financial statements

33. Investment in subsidiaries

	2022 £m	2021 £m
Cost of shares in subsidiary undertakings	4,292.3	4,292.3
Net book value	4,292.3	4,292.3

A full listing of direct and indirect subsidiary and associated undertakings has been included in note 43 to these financial statements. Investments in subsidiaries are stated at cost, less any provision for impairment. The key inputs consist of future RCV, RCV premium, future gearing and expected interest settlements. This impairment would be recognised within the Company income statement only. An impairment review is performed on an annual basis.

34. Trade and other receivables

	2022 £m	2021 £m
Other receivables	0.3	0.5
Amounts owed by group undertakings	428.7	445.6
Amounts receivable in respect of group relief	168.7	323.5
	597.7	769.6
Disclosed within non-current assets	332.1	417.5
Disclosed within current assets	265.6	352.1

Included within amounts owed by group undertaking are 3 intercompany loans with Thames Water Limited, including:

- £249.8m with an interest rate of 5.47% repayable on demand
- £50.0m with an interest rate of 5.40% repayable on demand
- £32.0m with an interest rate of 5.46% repayable on demand

Separately there is an intercompany receivable owed by Thames Water Limited of which £50.0 million (2021: £85.1 million) remains at 31 March 2022 and is interest free and repayable on demand.

These loans are repayable on demand, however the Directors confirm that there will be no repayment within 12 months and letters of comfort have been obtained from the counterparty to confirm that no repayment will be sought for at least 12 months from the date of signing the financial statements. Therefore, these amounts owed to group undertakings have been classified as non-current.

35. Deferred tax assets

An analysis of movements in the deferred tax assets recognised by the Company is set out below:

	Other timing differences £m	Total £m
At 1 April 2020	8.4	8.4
Charged to income statement	(1.7)	(1.7)
At 31 March 2021	6.7	6.7
Charged to income statement including impact of tax rate change	(0.6)	(0.6)
At 31 March 2022	6.1	6.1

In the Spring Budget 2021, the UK Government announced that from 1 April 2023 the corporation tax rate would increase from 19% to 25%. This new law was substantively enacted on 24 May 2021. Deferred taxes at the balance sheet date have been measured using these enacted tax rates and are reflected in these financial statements, except for deferred tax on timing differences which are expected to unwind by 31 March 2023 which continues to be provided at the current rate of 19%.

Notes to the Company financial statements (continued)

36. Cash and cash equivalents

	2022 £m	2021 £m
Cash at bank and in hand	0.1	0.3
Money market funds	249.7	286.2
Total	249.8	286.5

37. Trade and other payables

	2022 £m	2021 £m
Other payables	0.2	0.3
Amounts owed to group undertakings	-	1.7
	0.2	2.0
Disclosed within non-current liabilities	-	0.3
Disclosed within current liabilities	0.2	1.7

All amounts owed to group undertakings are unsecured, interest free and repayable on demand.

38. Net losses on financial instruments

	2022 £m	2021 £m
Loss on part repayment of amounts owed to group undertakings ¹	-	(2.7)
Total	-	(2.7)

¹ In November 2020, £62.6 million plus accrued interest was paid by KWF towards repayment of £59.9 million principal of the £175.0 million intercompany loan with TW(K)F. The £2.7 million premium paid on the part repayment of the £175.0 million intercompany loan has been recognised in net losses on financial instruments.

39. Borrowings

	2022 £m	2021 £m
Secured bank loans and private placements	940.4	938.8
Amounts owed to group undertakings	3,734.1	3,765.0
	4,674.5	4,703.8
Interest payable on secured bank loans and private placements	14.6	14.1
Interest payable on amounts owed to group undertakings	4,358.2	3,910.2
Total	9,047.3	8,628.1
Disclosed within current liabilities	138.0	21.0
Disclosed within non-current liabilities	8,909.3	8,607.1

Notes to the Company financial statements (continued)

39. Borrowings (continued)

Breakdown of secured bank loans and private placements

	2022 £m	2021 £m
Kemble Water Finance Limited:		
£200.0m floating rate loan due 2025 (a), (b)	198.8	198.5
£4.5m 5.3% fixed rate loan due 2025 (a)	4.4	4.4
£5.5m 5.3% fixed rate loan due 2025 (a)	5.4	5.4
£100.0m 5.3% fixed rate loan due 2025 (a)	98.9	98.6
£200.0m 5.3% fixed rate loan due 2025 (a)	197.7	197.1
£149.8m 5.39% fixed rate loan due 2026 (a)	148.0	147.6
£190.0m floating rate loan due 2024 (a), (b)	188.2	188.4
£50.0m 5.26% private placement due 2027 (a)	49.6	49.5
£50.0m 5.27% private placement due 2028 (a)	49.4	49.3
Kemble Water Finance Limited total	940.4	938.8
Total secured bank loans and private placements	940.4	938.8

(a) These loans and private placements are shown net of issuance costs.

(b) During the year, these loans have transitioned to SONIA (Sterling Overnight Index Average) from Libor (London Inter-Bank Offered Rate).

During the year ended 31 March 2021, the £75.0 million floating rate loan originally due in 2022 was repaid early.

Breakdown of amounts owed to group undertakings

	2022 £m	2021 £m
Thames Water (Kemble) Finance plc		
£175.0m 5.75% fixed rate bond due 2022 (a), (b)	115.0	114.8
£400.0m 4.625% fixed rate bond due 2026 (c)	398.7	398.3
Kemble Water Eurobond plc		
£3,100.6m 10.0% fixed rate loan due on demand (e)	3,100.6	3,100.6
Thames Water Investments Limited		
£15.0m floating rate loan due on demand (d), (e)	15.0	15.0
Thames Water Limited		
£136.3m floating rate loan due on demand (d), (e), (f)	104.8	136.3
Total amounts owed to group undertakings	3,734.1	3,765.0

- (a) This bond is on-lent at equivalent interest rate to the external borrowing rate, plus an annual margin of £10,000 (2021: £10,000).
- (b) In November 2020, £62.6 million plus accrued interest was paid by KWF towards repayment of £59.9 million principal of the £175.0 million intercompany loan with TW(K)F. The £2.7 million premium paid on the part repayment of the £175.0 million intercompany loan was recognised in losses on financial instruments.
- (c) This bond is on-lent at equivalent interest rate to the external borrowing rate, plus 0.10%.
- (d) This loan incurred interest at LIBOR + 0.5%, but from 1st April 2022 the interest rate will be SONIA+0.7766%
- (e) These loans are repayable on demand, however the Directors confirm that there will be no repayment within 12 months and letters of comfort have been obtained from the counterparty to confirm that no repayment will be sought for at least 12 months from the date of signing the financial statements. Therefore, these amounts owed to group undertakings have been classified as non-current.
- (f) In March 2022, the Company repaid £31.5m of the £136.3m floating rate loan.

Details of the significant accounting policies and methods adopted (including the criteria for recognition, the basis of measurement and the basis for recognition of income and expenses) for each class of financial asset, financial liability and equity instrument are disclosed in the accounting policies. The Company does not hold any derivative financial assets or liabilities (2021: none).

Notes to the Company financial statements (continued)

40. Financial instruments

The carrying values of the financial assets and liabilities are as follows:

	2022 £m	2021 £m
Financial assets:		
<i>Fair value through profit or loss</i>		
Cash and cash equivalents – money market funds	249.7	286.2
<i>Amortised cost</i>		
Trade and other receivables (excluding prepayments)	597.7	769.6
Cash and cash equivalents – cash at bank and in hand	0.1	0.3
Total	847.5	1,056.1
Financial liabilities:		
<i>Amortised cost</i>		
Trade and other payables (excluding other taxes and social security)	(0.2)	(2.0)
Borrowings	(9,047.3)	(8,628.1)
Total	(9,047.5)	(8,630.1)

Fair value measurements

The fair value of financial assets and liabilities represents the price that would be received to sell an asset or paid to transfer a liability between informed and willing parties, other than in a forced or liquidation sale at the measurement date. The techniques for determining the fair value of financial instruments are classified under the hierarchy defined in IFRS 13 *Fair Value Measurement* which categorises inputs to valuation techniques into Levels 1-3 based on the degree to which the fair value is observable. Unless otherwise stated all of the Company's inputs to valuation techniques are Level 2 - the fair value is determined from inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.

Comparison of fair value of financial instruments with their carrying amounts

The fair values and carrying values of the Company's financial assets and financial liabilities are set out in the tables below:

	2022		2021	
	Book value £m	Fair value £m	Book value £m	Fair value £m
Financial assets:				
<i>Non-current</i>				
Trade and other receivables (excluding prepayments)	332.1	332.1	417.5	417.5
<i>Current</i>				
Trade and other receivables (excluding prepayments)	265.6	265.6	352.1	352.1
Cash and cash equivalents	249.8	249.8	286.5	286.5
Total	847.5	847.5	1,056.1	1,056.1
Financial liabilities:				
<i>Non-current</i>				
Borrowings:				
Secured bank loans and private placements	(940.4)	(935.2)	(938.8)	(980.7)
Amounts owed to group undertakings	(3,619.1)	(3,606.3)	(3,765.0)	(3,774.1)
Interest payable	(4,349.8)	(4,358.3)	(3,903.3)	(3,903.3)
Trade and other payables (excluding other taxes and social security)	-	-	(0.3)	(0.3)
<i>Current</i>				
Borrowings:				
Amounts owed to group undertakings	(115.0)	(118.0)	-	-
Interest payable	(23.0)	(23.0)	(21.0)	(21.0)
Trade and other payables (excluding other taxes and social security)	(0.2)	(0.2)	(1.7)	(1.7)
Total	(9,047.5)	(9,041.0)	(8,630.1)	(8,681.1)

Notes to the Company financial statements (continued)

40. Financial instruments (continued)

Capital risk management

Details of the Group's capital risk management strategy can be found in note 20. The capital structure of the Company is as follows:

	2022 £m	2021 £m
Cash and cash equivalents	249.8	286.5
Secured bank loans and private placements	(940.4)	(938.8)
Interest payable on secured bank loans and private placements	(14.6)	(14.1)
Amounts owed to group undertakings	(3,734.1)	(3,765.0)
Interest payable on amounts owed to group undertakings	(4,358.3)	(3,910.2)
Net debt	(8,797.6)	(8,341.6)
Deficit attributable to the parent Company	(3,901.6)	(3,725.0)

Financial risk management

The Company's activities expose it to a number of financial risks: market risk (including interest rate risk), credit risk and liquidity risk. Details of the nature of each of these risks along with the steps the Company has taken to manage them is described below. The Company's activities expose it to market, credit and liquidity risk.

(a) Market risk

Market risk relates to fluctuations in external market variables such as interest rates that could affect the Company's value of the financial instruments it holds. Below is the effective interest rate profile of the debt held by the Company:

As at 31 March 2022:	Total at fixed rates £m	Total at floating rates £m	Total £m
Interest bearing loans and borrowings Net of corresponding swap assets - £ Sterling	4,167.7	506.8	4,674.5
Total	4,167.7	506.8	4,674.5

As at 31 March 2021:	Total at fixed rates £m	Total at floating rates £m	Total £m
Interest bearing loans and borrowings Net of corresponding swap assets - £ Sterling	4,165.7	538.1	4,703.8
Total	4,165.7	538.1	4,703.8

The weighted average interest rates of the debt held by the Company and the period until maturity for which the rate is fixed are given below:

	Weighted average interest rate for fixed rate debt		Weighted average period until maturity for which rate is fixed for fixed rate debt	
	2022 %	2021 %	2022 Years	2021 Years
Interest bearing loans and borrowings Net of corresponding swap assets - £ Sterling	8.8	8.8	12.4	13.4
Total	8.8	8.8	12.4	13.4

Notes to the Company financial statements (continued)

40. Financial instruments (continued)

Financial risk management (continued)

(a) Market risk (continued)

Interest rate risk sensitivity analysis

The table below summarises the impact, on pre-tax profits, of 1% increase or decrease in interest rate at 31 March 2022. This analysis considers the effect of variable interest rate instruments and assumes that all other variables, in particular exchange rates, remain constant.

	2022		2021	
	+1% £m	-1% £m	+1% £m	-1% £m
Profit	(3.9)	3.9	(3.9)	3.9
Equity	(3.9)	3.9	(3.9)	3.9

(b) Credit risk

The Company's maximum exposure to credit risk is the carrying amount of financial assets recorded in the financial statements, which is net of impairment losses, therefore the maximum exposure to credit risk at the year-end date was £847.5 million (2021: £1,056.1 million).

(c) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages long-term liquidity by maintaining continuity of funding through access to different market and debt instruments, raising funds in the capital markets and ensuring that manageable debt maturity profiles are maintained. The Company also maintains a level of committed liquidity facilities provided by a range of financial institutions. Details of the Company's borrowings are disclosed in note 39.

The maturity profile of the Company's financial liabilities disclosed in the statement of financial position are given below.

	2022 £m	2021 £m
Within one year	115.0	-
Between one and two years	-	114.8
Between two and three years	188.2	-
Between three and four years	505.2	188.4
Between four and five years	546.7	504.1
After more than five years	3,319.4	3,896.5
Total	4,674.5	4,703.8

Cash flows from non-derivative financial liabilities.

The maturity profile of the anticipated future cash flows including interest in relation to the Company's non-derivative financial liabilities on an undiscounted basis, which, therefore, differs from both the carrying value disclosed in the statement of financial position and fair values, is as follows:

	2022 £m	2021 £m
Undiscounted amounts payable		
Within one year	(185.9)	(74.4)
Between one and two years	(67.2)	(184.4)
Between two and three years	(250.9)	(65.9)
Between three and four years	(563.5)	(250.2)
Between four and five years	(568.4)	(563.3)
After more than five years	(3,325.7)	(3,925.5)
Total	(4,961.6)	(5,063.7)

Notes to the Company financial statements (continued)

40. Financial instruments (continued)

Financial risk management (continued)

IBOR reform

The following table contains details of all of the financial instruments that the Company holds at 31 March 2022 with an interest rate linked to GBP LIBOR which have not yet transitioned to SONIA or an alternative interest rate benchmark:

	Carrying Value at 31 March 2022		Of which: Have yet to transition to an alternative benchmark interest rate as at 31 March 2022	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Assets and liabilities exposed to GBP LIBOR				
<i>Amortised cost</i>				
Borrowings ¹	-	(119.8)	-	(119.8)
Total assets and liabilities exposed to GBP LIBOR	-	(119.8)	-	(119.8)

¹ Included in the £119.8 million of borrowings in the table above are £104.8 million loan from subsidiary Thames Water Limited and a £15 million loan from indirect subsidiary Thames Water Investments Limited, where the interest rate is directly linked to LIBOR.

41. Statement of cash flows

Reconciliation of operating profit to operating cash flows

	2022 £m	2021 £m
Loss for the financial year	(626.6)	(556.6)
Add finance expense	769.9	687.3
Less finance income	(17.9)	(0.1)
Decrease in intercompany receivables	35.1	31.6
(Decrease)/increase in intercompany payables	(2.8)	1.4
Group relief received	280.8	4.2
Taxation on loss on ordinary activities	(125.3)	(130.4)
Cash generated in operations	313.2	37.4

42. Related party transactions

During the year, Kemble Water Eurobond plc ("KWE"), the Company's immediate parent, charged the Company interest of £696.5 million (2021: £633.3 million) in respect of the £3,100.6 million 10% fixed rate loan due on demand. Also during the year, the Company repaid interest of £216.1 million in respect of this loan (2021: £nil). As at 31 March 2022, the amount payable to KWE, including loan principal and interest thereon, was £7,446.2 million (2021: £6,965.8 million).

The Company pays and receives interest to and from subsidiary undertakings in the normal course of business. Total net interest expense to and from subsidiary undertakings during the year was £696.5 million (2021: £634.0 million).

As at 31 March 2022 net amounts owed by the Company to subsidiary undertakings was £696.5 million (2021: £634.0 million). As at 31 March 2022 and 31 March 2021, no related party receivables or payables were secured and no guarantees were issued. Balances will be settled in accordance with normal credit terms.

Notes to the Company financial statements (continued)

43. Subsidiaries, associated undertakings, and significant holdings other than subsidiary undertakings

At 31 March 2022 the Company held the following principal interests, all of which are either wholly or jointly owned either directly or indirectly through its subsidiary investments.

	Principal undertaking	Country of incorporation	Country of tax residence	Class of shares held	Proportion of voting rights and shares held
Direct					
Thames Water (Kemble) Finance plc	Finance Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Limited	Holding Company	United Kingdom	United Kingdom	Ordinary	100%
Indirect					
Thames Water Utilities Holdings Limited	Holding Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Utilities Limited	Water & wastewater	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Utilities Finance Plc	Finance company	United Kingdom	United Kingdom	Ordinary	100%
Kennet Properties Limited	Property company	United Kingdom	United Kingdom	Ordinary	100%
Innova Park Management Company Limited	Property Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Property Services Limited	Property Company	United Kingdom	United Kingdom	Ordinary	100%
PWT Projects Limited	Dormant Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Products Limited	Non-Trading Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Investments Limited	Property Company	United Kingdom	United Kingdom	Ordinary	100%
Foudry Properties Limited	Property Company	United Kingdom	United Kingdom	Ordinary	50%
Thames Water Pension Trustees Limited	Pension Trustees	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Pension Trustees (MIS) Limited	Pension Trustees	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Senior Executive Pension Trustees Limited	Pension Trustees	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Overseas Limited	Holding Company	United Kingdom	United Kingdom	Ordinary	100%
Thames Water Asia Pte Limited	Legacy Investment	Singapore	Singapore	Ordinary	100%

The address of the registered office of all the above companies is Clearwater Court, Vastern Road, Reading, Berkshire, RG1 8DB with the exception of:

- Thames Water Asia Pte Limited (80 Robinson Road #02-00, Singapore, 68898)