United Utilities Group PLC

Integrated Annual Report and Financial Statements for the year ended 31 March 2023

United Utilities

Water for the North West

Contents

Welcome to our Integrated Annual Report 2023

The principal activities of the group, generating more than 99 per cent of group revenue, sit within the regulated entity United Utilities Water Limited, which provides water and wastewater services for the North West of England.

£14bn(1)

Regulatory Capital Value (RCV) making our regulated business, United Utilities Water Limited, the second largest water and wastewater company in England and Wales.

7.4m

people served across the North West, with over 3 million households and 200,000 businesses.

1.8bn

litres of clean water delivered, and 3.1 billion litres of wastewater treated, on average, every day.

100%

renewable electricity throughout our operations. Around 24 per cent of our electricity needs are generated directly by ourselves and on-site with our partners, and we purchase only certified green electricity for the remainder.

(1) RCV is a measure of the company's historic market value plus the value of accumulated capital investment assumed at each price review. Our RCV has been adjusted for actual spend, timing differences and includes the full expected value of AMP7 ex-post adjustment mechanisms.

unitedutilities.com/corporate

Our purpose is to provide great water for a stronger, greener and healthier North West

This drives us to deliver our services in an environmentally sustainable, economically beneficial, and socially responsible manner and create sustainable long-term value for all. Active engagement and strong constructive relationships help us understand and respond to the things that matter most to our stakeholders:

Read more on pages 56 to 57

Strategic priorities

Our strategy to enable delivery of our purpose has six priorities:

- Improve our rivers
- Create a greener future
- Provide a safe and great place to work
- Deliver great service for all our customers
- Spend customers' money wisely
- Contribute to our communities

These strategic priorities permeate everything we do, and that can be seen throughout this report. The stages in our water cycle, our principal risks, board and committee activities, and the measures in our remuneration policy are all aligned to one or more of these themes.

Keep in touch with us

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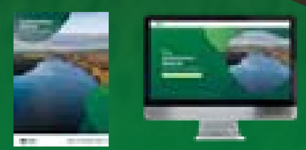
youtube.com/user/unitedutilities
linkedin.com/company/united-utilities/posts

Visit our corporate website at **unitedutilities.com/corporate**

See our report online

Use the link below or scan the QR code to view our online report and download the full integrated annual report and financial statements.

Visit our online report at **unitedutilities.annualreport2023.com**



Our annual performance report

We report our performance in a regulatory format that helps customers and other stakeholders understand it and compare it with other companies in the sector.

Our annual performance report will be available from 15 July at **unitedutilities.com/corporate/about-us/performance/annual-performance-report**

Stock code: UU.

Reporting methodology

Our purpose and strategy are intrinsically linked to ESG

We have taken the opportunity to refresh our purpose and strategy as we look ahead and mobilise for the next investment period between 2025 and 2030.

We engaged with stakeholders and colleagues to define six strategic priorities and expand our purpose, to ensure our ambitions are clearly defined and targeted at the company we want and need to be.

In doing so, it has become even clearer how strongly environmental, social and governance (ESG) matters are integrated into the way we approach our business and the way we monitor our performance – everything aligns under the stronger, greener and healthier ambitions within our purpose.

The below infographic demonstrates the alignment between our purpose – to provide great water for a stronger, greener and healthier North West – and our six strategic priorities with ESG.

It shows the link between our purpose and the UN Sustainable Development Goals (SDGs) that we contribute towards.

Our metrics and targets, including our operational key performance indicators (KPIs), are linked to ESG and aligned to the stronger-greener-healthier elements of our purpose, with clear links to our strategic priorities.

Providing great water for a stronger, greener and healthier North West

Benchmarking our ESG performance

For over 20 years we have measured ourselves against national and international benchmarks of responsible business practice, often breaking new ground in the way the water sector approaches challenges such as catchment management and helping customers struggling to pay their bills through affordability schemes.

We align ourselves to recognised management standards and accreditations to give confidence in the way we are operating. We continue to evolve existing programmes, develop new initiatives, and respond to the changing world in which we operate. For example, we have been undertaking a project to integrate six-capitals thinking into business processes and planning to better inform our decision-making and enable us to create and protect value for all stakeholders.

Read more about the six capitals on page 34

We actively participate in a range of global ESG ratings, indices and frameworks to benchmark our approach against best practice and emerging sustainability challenges. Our strong consistent performance against these external benchmarks demonstrates our commitment to operating in a responsible manner, and we monitor our performance against a suite of trusted indices as one of our operational key performance indicators (KPIs).

Read more about our performance against these ratings and indices on pages 104 to 109

Many of the ESG indices in which we participate draw their data from this report. We collate, monitor and report publicly on a wide range of performance measures across ESG categories, with consideration to what stakeholders tell us matters most, as well as our contribution to wider value and global goals such as the UN SDGs and climate change mitigation goals.

In addition to the wealth of ESG disclosures and performance data throughout this report, the following indicates where further information on certain frameworks can be found:

World Economic Forum (WEF) International Business Council (IBC)

The WEF IBC has proposed a set of common metrics for the consistent reporting of sustainable value creation in mainstream annual reports. We already integrate many of these metrics in our integrated annual report and to make this easier for those searching for the information we have collated them into one place on our website.

Read more on our website at unitedutilities.com/corporate/responsibility/our-approach/cr-reporting/wef

Sustainability Accounting Standards Board (SASB)

SASB standards aim to standardise disclosure of material sustainability information mainly for companies based in the United States. As many of our shareholders are located in North America we publish comparable SASB data on our corporate website. This covers the main SASB data points for the water utilities industry, of which we are part.

Read more on our website at unitedutilities.com/corporate/responsibility/our-approach/cr-reporting/sasb

Updating our report to further integrate ESG disclosures

The frameworks and standards for ESG reporting are developing rapidly in response to growing expectations and increasing interest from investors and other stakeholders. For example, the draft standards from the International Sustainability Standards Board (ISSB) ask that all material sustainability-related risks and opportunities be disclosed in line with the four-pillar approach used by the Task Force on Climate-related Financial Disclosures (TCFD), i.e. providing information on strategy, governance, risks and opportunities, and metrics and targets.

As part of our drive to continuously improve our reporting to meet investor and other stakeholder needs, we have evolved our report this year to incorporate these four pillars centrally to our business model. As a result, our sustainability disclosures (including the required components of TCFD reporting) are integrated much more fully across our report. Each pillar of our business model provides general company information as well as more specific climate and nature-related information, and other key issues of material interest to readers.

This mirrors the integrated thinking approach we take to running the business, with sustainability considerations integral to everything we do. While this provides the most accurate reflection of our business, we recognise that some readers have targeted areas of interest and may not wish to read the report in full to find the relevant information.

To ensure it is as easy as possible for all readers to find what they are looking for, we use colour coding and iconography to enable quick and easy identification of climate, nature and other elements throughout this report, and pages 04 and 05 signpost to the pages on which non-financial information and the requirements of TCFD and TNFD can be found.

We have also adapted the way we present our operational performance for the year and our key performance indicators. These are now structured across the ESG headings, in alignment with the 'stronger', 'greener' and 'healthier' ambitions of our refreshed purpose. We continue to monitor and disclose how our activities and performance impact our stakeholders, retaining a comprehensive spread of metrics in relation to each stakeholder group.

Open, honest and transparent reporting is at the core of our responsible business approach. As the reporting landscape develops further, we will continue to adapt our disclosures to take account of international best practice in the presentation of ESG performance and data.

Integrated reporting and our sustainability report

We are keen to help meet the information needs of all our stakeholders, and have published a separate sustainability report this year to present our ESG disclosures in a format that some readers may find more familiar and easier to use. For the avoidance of doubt, readers of this integrated annual report do not need to read the sustainability report as well as sustainability-related disclosures are already included throughout this report. The additional sustainability report is a presentational alternative for stakeholders who are not interested in the financial aspects of our performance.

Read our sustainability report at unitedutilities.com/corporate/responsibility/our-approach/esg-performance

Our non-financial disclosures

Non-financial information statement

The table below constitutes the company's non-financial information statement, produced to comply with sections 414CA(1) and 414CB(1) of the Companies Act 2006. Our purpose-driven approach, as described on page 38, sets out how we act as a responsible business and is applicable to the areas of disclosure required by s414CB(1). A brief description of our business model is set out on pages 18 to 19. We demonstrate that we are fulfilling our purpose in our performance section on pages 84 to 117.

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

Reporting requirement	Information necessary to understand our business and its impact; policies and due diligence activities; and outcomes	Policies, guidance and standards which govern our approach (some of which are only published internally)
Environmental matters	Reflecting the needs of the environment: • Natural resources – see pages 35 and 87 • Natural environment – see pages 20 and 24 • Energy and carbon report – see pages 93 • TCFD and TNFD reporting – see page 05	• Waste and resource use policy • Environmental policy – see the responsibility pages on our website • Water Resources Management Plan – see page 41 • Climate change mitigation policy
Colleagues	Reflecting the needs of our colleagues: • Health and safety – see pages 35, 49, 53, 64, 66, 73, and 100 to 102 • Mental wellbeing – see pages 35, 49, 53, and 73 • Competitive base salaries and benefits – see page 186 • Gender pay report 2022 – see page 55 • Engagement – see pages 35, 56, and 100 to 102 • Board diversity – see page 143	• Health and safety policy • Mental wellbeing policy • Equity, diversity and inclusion policy • Flexible working arrangements • Agency worker policy • Human rights policy – see pages 73, 76, and 108 • Board diversity policy – see page 143
Respect for human rights	Reflecting the needs of our stakeholders: • Suppliers – see page 108 • Diversity within our workforce – see pages 35, 49, 54 to 55, 65, 73, 76, 82, and 100 to 102	• Colleague data protection policy • Slavery and human trafficking statement • Human rights policy – see pages 73, 76, and 108
Social matters	Reflecting the needs of our stakeholders: • Customers – see pages 37, 57, 66, and 76 to 77 • Communities – see pages 37, 56, 66, and 77 • Environment – see pages 56, 66, and 76 • Suppliers – see pages 53, 56, 66, 73, 76, and 108 • Regulators – see pages 57 and 64	• YourVoice – see page 138 • Charitable matched funding guidance • Volunteering policy • United Supply Chain – see pages 53, 108, and 213 • Commercial procurement policy
Anti-corruption and anti-bribery	Reflecting the needs of colleagues and suppliers: • Colleagues – see pages 38, 64, 137, and 167 • Suppliers – see pages 56, 108, 167, and 107 to 108	• Anti-bribery policy • Fraud investigation and reporting processes • Whistleblowing policy • Internal financial control processes • Commercial procurement policy

Key frameworks to look out for throughout our report

TCFD

The Task Force on Climate-related Financial Disclosures has set out a framework of recommended disclosures relating to the financial implications of climate change and what this means for governance, strategy, risk and metrics.

TNFD

The Task Force on Nature-related Financial Disclosures is developing a framework for risk management and disclosure for organisations to report, and act on, evolving nature-related risks and related governance, strategy, risk and metrics.

Our TCFD, TNFD and other sustainability disclosures

Sustainability concerns, including climate and nature, are fundamental to our business and integrated in everything we do.

Our activities are so reliant on the natural environment that assessing and managing the risks, opportunities, dependencies and impacts we have in relation to climate change and nature is integral to our entire business model, therefore disclosures in relation to these issues are integrated throughout our report to reflect the way we think about these issues. Other material matters are integrated in the same way, including cyber security, financial risk management, affordability and vulnerability, health, safety and wellbeing, responsible business in our supply chain, and equity, diversity and inclusion.

As mentioned on page 03, we have adapted our business model to follow the four-pillar structure that links the Task Force on Climate-related Financial Disclosures (TCFD), Task Force on Nature-related Financial Disclosures (TNFD) and International Sustainability Standards Board (ISSB) recommendations. To assist readers with finding the disclosures of interest to them, this page shows where disclosures can be found throughout the report, and these are colour-coded and icon-indicated throughout for easy identification, as demonstrated in the table below.

	TCFD – Where to find our TCFD disclosures		TNFD – Where to find our TNFD disclosures		OTHER – Where to find our Other disclosures	
	Pages	**Topic**	**Pages**	**Topic**	**Pages**	**Topic**
Governance	50–59	Company-wide governance				
	130–138	Further detail on board and management committees, including structure responsibilities and meeting frequency				
	58	Section 172(1) Statement				
	52	Board oversight of climate-related risks and opportunities	53	Board oversight and management role in managing and assessing nature-related dependencies, impacts, risks and opportunities	53–55	Governance around other risk and opportunities of material interest
	52	Management role in assessing and climate-related risks and opportunities				
Strategy	38	Strategic priorities				
	39–41	Planning horizons : what we mean by short term, medium term and long term				
	28–31	Our approach to materiality assessment				
	42–44	Climate risks and opportunities identified over short, medium and long term	49	How nature influences our approach, strategy and planning, and the resilience of our strategy to different scenarios, with adaptive planning	49	Other risk and opportunities of material interest that influence our approach
	43–44	Impact of climate-related risks on our strategy and planning				
	44	Use of climate-related scenarios				
	45–47	Net zero transition plan				
	71	Our risks most sensitive to climate change				
	241	Climate-related financial planning				
Risk and opportunities	60–69	Our approach to identifying , assessing and managing risks and opportunities including our principal risks, common themes, most significant event-based risks, and new and emerging risks and opportunities				
	70	How we identify and assess climate-related risks	72	How we identify, assess and manage nature-related risks, and how this is integrated into our risk management processes	73	How we identify, assess and manage other risks other risk and opportunities of material interest
	71	Management of climate-related risks				
	71	Integration of climate-related risks into our risk management processes				
	71	Our risks most sensitive to climate change				
Metrics and targets	76–83	Metrics and targets for assessing general company performance, and assurance of those metrics				
	83	Short, medium and long-term targets				
	84–111	Operational performance for 2022/23				
	81	Metrics and targets used to assess climate-related risks and opportunities	82	Metrics and targets used to assess and manage nature-related dependencies, impacts, risks and opportunities	82	Metrics and targets in relation to other risks and opportunities of material interest to stakeholders
	93–95	Energy and carbon report with scope 1, 2 and 3 greenhouse gas (GHG) emissions				
	81	Targets used to manage climate-related risks				

Chair's review

Sir David Higgins
Chair

As we thank Steve Mogford for over 12 years of service to the company, we are excited to welcome Louise Beardmore as Chief Executive Officer. Having overseen the price review process since her appointment as CEO designate in May 2022, Louise is ensuring the company is mobilised and ready for the 2025–30 period.

We have taken the opportunity to refresh the group's purpose, strategic priorities, and core values to ensure these clearly reflect the key areas of focus in the current landscape, and our ongoing commitment to environmental, social and governance (ESG) matters.

The water industry is facing a number of challenges and there is a need to restore public trust, but we are committed to continuing to drive improvements for customers, the environment, and all our stakeholders.

The events of the last few years have tested the water industry, just as they have challenged the economy more widely. The COVID-19 pandemic and conflict in Ukraine led to both operational challenges and rapidly rising inflation, with increased prices presenting significant cost of living pressures for customers.

At the same time as we have been adapting and responding to these challenges, we have also seen a surge of concern regarding the sector's historic and ongoing use of storm overflows. A requirement to reduce the number of activations has now been passed into legislation, alongside a number of other very stretching environmental targets as part of the Environment Act. Meeting these new requirements to reduce activations and improve river health will require a substantial programme of work and sustained investment over a number of regulatory periods. In the case of storm overflows, the regional investment requirements are even more substantial than in some other areas of the country, reflecting that the North West has a high number of overflows, a higher than typical amount of rainfall, a greater amount of surface water runoff entering our sewers and a higher prevalence of sewers that combine surface water and sewage. Together, these factors mean that of £56 billion of investment projected by Defra to achieve storm overflow targets, around £20 billion is attributed to the North West.

United Utilities is responding well to these challenges. To help customers facing financial challenges we have committed more affordability support than any other water company in the 2020–25 period. Beyond the baseline expenditure for the current regulatory period, we are investing an additional £765 million to deliver customer and environmental improvements, including around £250 million of reinvestment to support our Better Rivers programme and other environmental enhancements. We are already achieving significant reductions in activations of storm overflows, helping to improve river quality across the region, and we recently got provisional approval to accelerate environmental investment, starting work two years early on over £900 million of AMP8 schemes mostly in relation to reducing activations from overflows. We are committed to delivering this work efficiently, effectively and with urgency.

We have been pleased to see that the additional investment made has also delivered improvements in the water service, reflected in a strong performance on key metrics – including tackling leakage – and the company's exit from the Drinking Water Inspectorate's transformation programme is demonstration of the sustained improvement in the performance and resilience of drinking water supplies to customers in the region. The board is also pleased with the further progress made this year on procurement for the Haweswater Aqueduct Resilience Programme. We expect that this will provide an enduring and resilient solution to replace a critical part of our potable water network.

Our first female CEO, and other board changes

On 31 March 2023, the company said goodbye and wished Steve Mogford a long and happy retirement after just over 12 years as Chief Executive Officer. During that time, Steve has transformed not only the performance of the business, but the relationships and perceptions of the group with many of its key stakeholders. As previously announced, Louise Beardmore, who was appointed as CEO designate with effect from 1 May 2022, succeeds Steve. Steve and Louise have worked together since May 2022, to ensure an orderly handover of the Chief Executive's responsibilities. Since her appointment as CEO designate, Louise has overseen preparations for the price review process for the 2025–30 regulatory period. During this important time when the tone is being set for the next five-year regulatory cycle, Louise has been actively developing relationships and representing the group to its regulators and other key stakeholders and those with influence at a parliamentary level.

The nomination committee has been busy during the year identifying a candidate to fill a vacancy for a non-executive director brought about by Stephen Carter stepping down from the board after the 2022 AGM, following his appointment to the board of Vodafone. The search culminated with the appointment of Michael Lewis. We are delighted that Michael has accepted the role as an independent non-executive director with effect from 1 May 2023. He brings to the board a wealth of experience of working in a regulatory environment, having worked in the electricity industry for most of his career. He has spent a considerable amount of time focusing on sustainability issues, particularly during his time as CEO of E.ON UK. He was appointed as a member of the ESG committee (formerly the corporate responsibility committee) on his appointment. Prior to Michael's appointment, the refocusing of the committee's activities was undertaken to better reflect current stakeholder expectations, and it was renamed as the ESG committee.

Strategic refresh

With the water industry evolving to meet new challenges and priorities, we gained feedback from stakeholders and colleagues on what we need to do and how we need to do it, and took the opportunity to refresh our purpose, strategic priorities and core values to better reflect the business we now need to be. The group's purpose, to provide great water for a stronger, greener and healthier North West, and its six strategic priorities, reflect the key areas of focus that are needed in the coming years, as well as demonstrating the clear alignment of our ambitions with ESG concerns, as can be seen on page 02. Our core values have been redefined to reflect the responsible and high performance culture we want to drive, both at board level and right through the organisation, with every one of our colleagues focused on doing the right thing, making it happen, and being better.

Dividend and annual general meeting

The board has proposed a final dividend of 30.34 pence per share, to be paid on 1 August 2023, taking the total dividend for the 2022/23 financial year to 45.51 pence per share. This is an increase of 4.6 per cent,[1] in line with our AMP7 policy of targeting an annual growth rate of CPIH inflation through to 2025.

I look forward to meeting shareholders at the annual general meeting (AGM) which is being held on 21 July 2023. Historically, the meeting has taken place at a location in Manchester. For the previous two years we provided a virtual link for shareholders to watch and, at our 2022 hybrid meeting, participate fully. There was very limited takeup for virtual attendance, therefore for 2023 we will revert to the more traditional approach for conducting the business at the meeting. As many companies are now doing, we will be using our own facilities for the event, which will be held for the first time at the group's main offices in Warrington.

Outlook

With two years remaining in AMP7, we remain focused on continuing to deliver a great service for customers and driving environmental improvements, while simultaneously preparing for AMP8.

The business plan we will submit in October will include the most significant environmental improvement plan of any period so far. This will bring both challenges and opportunities for the company and the North West, and we will need to embrace new ways of working and collaborate with others to drive the big improvements that we and our many stakeholders want to see over 2025–30 and beyond. This plan will represent a step towards our longer-term plans, and our long-term delivery strategy is embedded within our plans for AMP8 with a number of adaptive planning pathways considered to ensure we are prepared for the challenges that may lie ahead. This includes our carbon pledges and net zero transition plan, which you will find on pages 45 to 47 of this report.

We are clear on what we need to deliver and confident in our approach and our plans to meet our ambitions.

Thank you

On behalf of the board, I want to extend our heartfelt thanks to everyone in the company for the hard work, dedication and enthusiasm you have shown over the year. With the continued support of our colleagues and all our stakeholders, we are confident in our plans to build a stronger, greener and healthier North West.

Sir David Higgins
Chair
24 May 2023

Read more about our **purpose and strategic priorities** on page 38

Read more about our **Better Rivers: Better North West** programme on page 90

Read more about our **net zero transition plan** on pages 45 to 47

The strategic report on pages 08 to 119 was approved at a meeting of the board on 24 May 2023 and signed on its behalf by Sir David Higgins, Chair.

45.51p
per share total dividend in respect of the 2022/23 year

+4.6%
increase, in line with the annual increase in CPIH inflation to November 2021

21 July
annual general meeting (AGM) to be held at our headquarters

[1] The dividend increase is based on the CPIH element included within allowed regulatory revenue for the 2022/23 financial year (i.e. the movement in CPIH between November 2020 and November 2021).

Providing great water for a stronger, greener and healthier North West

Our business model set out in this strategic report reflects how we deliver our purpose, how we are governed, how we manage risks and opportunities, our short, medium and long-term targets, and the metrics we use to assess the value we contribute to society, the environment, and all of our stakeholders.

Strategic report

Highlights for 2022/23 – Our operational key performance indicators

KPI status key

Met expectation/target | Close to meeting expectation/target | Behind expectation/target

Delivering our purpose is about more than just providing customers with water and removing wastewater. Our operational key performance indicators (KPIs) provide an overview of how we are creating a stronger, greener and healthier North West.

Read more about our operational performance on pages 84 to 111

Providing great water

We measure the provision of our core services through a host of measures, including how we are doing against our regulatory performance commitments, where we have met or exceeded 83 per cent of these targets this year – our best ever performance. C-MeX is a regulator-compiled assessment that measures overall customer satisfaction with our services, and we use this as our KPI for customer service.

...for a stronger, greener and healthier North West

Our industry-leading environmental performance with zero serious pollution incidents, Better Rivers programme driving a 39 per cent reduction in storm overflow activations, and the progress we are making in reducing our carbon footprint, are all helping to protect the natural environment in the North West. We provide an industry-leading package of affordability support, and have continuously improved our colleague accident frequency rate every year for the last five years. We invest in communities, spend money wisely and efficiently, and our strong governance and responsible business approach contribute to consistently strong performance against a suite of investor ESG indices.

Better Rivers commitments

KPI performance

100%
of commitments for the year achieved

Met expectation/target

Our progress this year
We have achieved all our commitments for 2022/23, making good progress towards our targets for 2025, and we have driven a 39 per cent reduction in reported storm overflow activations since 2020.

Link to remuneration
Bonus

Carbon pledges

KPI performance

33	585ha	37ha	23%
green vehicles	peatland restored	woodland created	supplier engagement

Met expectation/target

Our progress this year
We have plans for 200 electric vehicles in the next 18 months. We are more than halfway to our 2030 peatland target, and are making good progress on woodland creation despite slower planting this year due to weather and tree disease. We are working with our construction partners to reduce scope 3 emissions, with 23 per cent having set science-based targets.

Link to remuneration
LTP

EA performance

KPI performance

4* industry leading
in the EA's latest Environmental Performance Assessment (EPA)

Met expectation/target

Our progress this year
The most recent assessment from the Environment Agency (EA) is for 2021, when we were awarded the maximum four stars for the second year running and classed by the EA as an industry-leading company. The EA will publish its Environmental Performance Assessment for 2022 in July 2023.

Link to remuneration
LTP

Colleague engagement

KPI performance

82%

Met expectation/target

Our progress this year
We have great engagement from colleagues across the business, scoring 82 per cent in our latest survey. Although this is slightly lower than the 87 per cent we scored last year, it is higher than both the UK norm and Utilities norm.

Link to remuneration
n/a

C-MeX

KPI performance

4th WaSC
5th of all 17 companies

Close to meeting expectation/target

Our progress this year
We were once again the top ranked listed company for customer satisfaction, ranked fourth among the 11 water and sewerage companies (WaSCs) and fifth overall out of all 17 companies including those that provide water-only services. We expect to earn a £3 million reward this year.

Link to remuneration
Bonus

Customers lifted out of water poverty

KPI performance

84,002

Met expectation/target

Our progress this year
We have already surpassed our target of helping 66,500 customers out of water poverty by 2025, achieving this for more than 80,000 customers – providing critical affordability support in the face of an increasing cost of living.

Link to remuneration
LTP

Capital programme delivery incentive (CPDi)

KPI performance

92.9%

Met expectation/target

Our progress this year
We exceeded our target of at least 85 per cent, delivering strong performance against the new CPDi measure, which places greater emphasis on efficiency compared with our previous time:cost:quality index (TCQi) metric.

Link to remuneration
Bonus

Community investment

KPI performance

£2.88m

Met expectation/target

Our progress this year
We achieved our £2.82 million annual target for community investment, contributing £2.88m. This was through increased investment in environmental and community partnerships, delivery of education in schools, and the contribution of time volunteered by our colleagues across the business.

Link to remuneration
n/a

Investor indices

KPI performance

Upper quartile
across a suite of trusted indices

Met expectation/target

Our progress this year
Our approach to responsible business has ensured consistent upper quartile performance across a range of ESG ratings and indices. We are a member of the Dow Jones Sustainability World Index, improved our latest CDP score to A-, and in the Sustainalytics assessment we continue to be classified as low risk and a top ten performer in the Utilities industry group.

Link to remuneration
n/a

Highlights for 2022/23 – Our financial key performance indicators

KPI status key

- Met expectation/target
- Close to meeting expectation/target
- Behind expectation/target

Strong financial performance facilitates delivery of our purpose. Our financial key performance indicators (KPIs) include income statement, balance sheet, regulatory and investor return metrics to provide a snapshot of our performance for the year.

Read more about our **financial performance** on pages 112 to 119

Providing great water

A robust and resilient financial position, and ability to raise efficient financing, is essential to ensure our ability to fund the long-term infrastructure projects that are needed so we can continue providing great water now and in the future.

...for a stronger, greener and healthier North West

We are investing to accelerate improvements for customers and the environment in the North West, and our work supports thousands of jobs, both directly and through our supply chain. Maintaining a responsible level of gearing helps us fund this investment efficiently and effectively. Return on regulated equity (RoRE) measures how we have delivered against regulatory allowances and targets for operational and financing performance, and the dividends we pay provide a reliable income for many pension funds and charities among our shareholder base.

(1) Underlying operating profit and underlying earnings per share are alternative performance measures that exclude adjusted items from their reported equivalents. Underlying operating profit excludes any significant non-recurring items. Underlying EPS deducts underlying net finance expense, underlying share of joint venture losses, and underlying taxation from underlying operating profit to calculate underlying profit after tax, and divides this by the average number of shares in issue during the year. Underlying net finance expense makes adjustments including stripping out fair value movements. Underlying taxation strips out deferred tax (including any tax credits or debits arising from changes in the tax rate) and any exceptional tax. A description of adjusted items, the framework by which these are assessed, and reconciliations between reported and underlying measures, can be found on pages 118 and 119.

Underlying operating profit

See note 1

Our target
Not externally disclosed

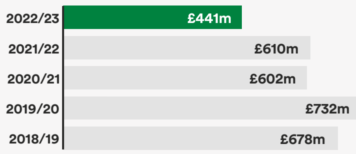
KPI performance

£441 million

Reported operating profit: £441 million

Behind expectation/target

Our progress this year
Operating profit has fallen £169 million compared with last year, primarily driven by lower consumption reducing revenue, and the impact of inflation on our core costs, particularly power and chemicals.



Link to remuneration
Underlying operating profit is one of the measures for the annual bonus. It is indirectly linked to the Long Term Plan (LTP) as financial performance impacts relative total shareholder return

Gearing

Group net debt (plus loan receivable from our joint venture) divided by UUW's regulatory capital value.

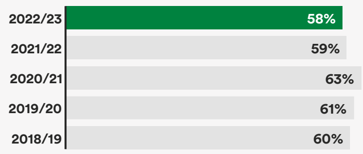
Our target
55–65%

KPI performance

58%

Met expectation/target

Our progress this year
Gearing has fallen slightly compared with 59 per cent last year due to the increase on our RCV, driven mostly by inflation, being proportionally higher than the increase in our net debt.



Link to remuneration
n/a

Dividend per share (EPS)

Total dividends declared divided by the average number of shares in issue during the year.

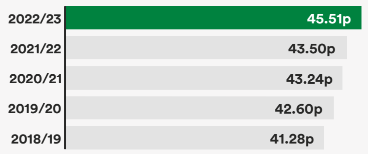
Our target
Annual growth in line with CPIH inflation to 2025

KPI performance

45.51 pence

Met expectation/target

Our progress this year
Board has proposed a final dividend of 30.34 pence which takes the total dividend to 45.51 pence per share for 2022/23. This is an increase of 4.6 per cent, in line with our policy of targeting an annual growth rate of CPIH inflation through to 2025.



Link to remuneration
Delivery of our dividend policy is an underpin that applies to the Long Term Plan outcomes

Underlying earnings per share (EPS)

See note 1

Our target
Not externally disclosed

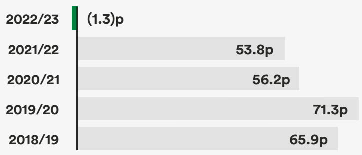
KPI performance

-1.3 pence

Reported EPS: 30.1 pence

Behind expectation/target

Our progress this year
Underlying loss per share is primarily driven by the movement in operating profit and a higher underlying finance expense. Reported EPS is higher due to fair value gains, profit on disposal of a subsidiary, and a reduction in deferred tax due to a one-off charge in the prior year to restate at the new future headline rate.



Link to remuneration
Underlying EPS is indirectly linked to the LTP as financial performance impacts relative TSR

Return on regulated equity (RoRE)

Base allowed return plus or minus any out or underperformance.

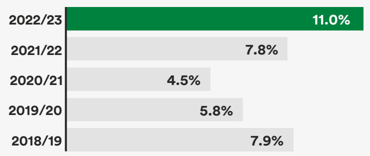
Our target
Not externally disclosed

KPI performance

11.0%

Met expectation/target

Our progress this year
We delivered our best ever RoRE performance with financing outperformance (net of tax) of 4.7 per cent, tax outperformance of 2.5 per cent, and customer ODI outperformance of 0.5 per cent, partially offset by the totex impact of -0.8 per cent.



Link to remuneration
RoRE is a performance measure in the LTP, and is indirectly linked to the bonus as it is influenced by two bonusable measures: C-MeX and ODIs

Total shareholder return (TSR)

Based on the movement in share price plus dividends over each financial year.

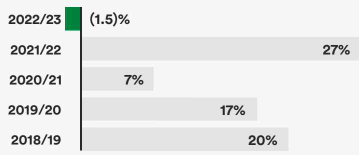
Our target
We assess our performance each year against listed peers in the utility sector and against the FTSE 100

KPI performance

-1.5%

Close to meeting expectation/target

Our progress this year
TSR was a slight negative in the year to 31 March 2023, which was behind the FTSE 100 return of 5.4 per cent and some other utility peers, but ahead of our listed water company peers.



Link to remuneration
Relative TSR is a measure applying to LTP awards vesting this year but is assessed over a three-year period

Chief Executive Officer's review

Louise Beardmore
Chief Executive Officer

We have delivered our best ever performance for customers, having met or exceeded more of our performance commitments this year than ever before. We were once again the top performing listed company for customer satisfaction as assessed by Ofwat's C-MeX measure. We have provided affordability support to more than 330,000 households so far in this regulatory period to support customers who are understandably struggling with cost of living pressures.

We are acutely aware that this is a critical time for the water sector, with many challenges facing us, especially around river health. We have delivered significant environmental improvements in recent years in areas such as improving beaches, reducing pollution and reducing leakage, but we should all have acted sooner to recognise and address the impact of storm overflows.

In the North West, we have delivered a 39 per cent reduction in reported activations from storm overflows compared to the 2020 baseline, but there is a lot more to do and we have ambitious plans to go further and faster to drive a real step change. This won't happen overnight; it will take sustained effort and investment over time, but we are committed to acting as fast as we can. With the support of our regulators we are accelerating investment, making a start on improvements at one third of the overflows we are targeting in AMP8. As a result we will be investing a further £200 million in the next two years.

In October we will be putting forward our business plan with the biggest environmental improvement programme we will have ever proposed. Along with all my colleagues, we are looking forward to the opportunity to build a stronger, greener and healthier North West.

Strengthening our industry-leading affordability support for customers

We are passionate about protecting customers in vulnerable circumstances through our comprehensive suite of support schemes and an industry-leading £280 million[1] package of affordability support. The cost of living crisis has made things even more challenging for deprived communities in our region. With a growing number of customers asking for help with their water bill, we have been working hard to increase awareness of available support, the option of flexible payment plans, and to provide water efficiency advice.

We are determined to play a role in making the North West stronger. This is the fourth year we have taken a leading role across our region, bringing together all stakeholders and communities to focus on affordability and vulnerability issues.

Delivering improvements in performance for customers and the environment

Our operational performance has been strong this year – we have met or exceeded 83 per cent of our performance commitments, earning a net customer ODI reward of approximately £25 million. This reflects strong delivery for customers and the environment in the North West.

Our investment in improving water quality – principally to avoid discolouration – has supported a 26 per cent improvement in water quality contacts this year. This is contributing towards our ODI performance, alongside other water measures such as water service resilience and supporting the removal of lead pipes from customers' properties.

Reducing leakage is of huge importance for our stakeholders and for us as an organisation. This year we have delivered our best performance to date against our performance commitment, resulting in an ODI reward. While we are making great progress, we recognise we continue to have a high absolute level of leakage. We are challenging ourselves to go further in reducing leakage – from our network and in customer properties – as it is critical to helping us better manage and conserve water resources. Alongside this we have delivered our largest ever reduction in Per Capita Consumption (PCC), supported by help and advice to encourage customers to use less water and amplify the link between heating water and energy bills.

Our basket of measures for avoiding flooding is also delivering a net ODI reward, and we continue to make great progress in reducing flooding incidents. We have nearly halved the number of internal sewer flooding incidents since the start of AMP7. This year's performance includes a 39 per cent reduction in repeat internal flooding incidents.[2] This has been supported by our investment in Dynamic Network Management (DNM).

In the winter, we experienced a rapid and severe freeze-thaw event that resulted in burst pipes across the region. Our teams and partners worked exceptionally hard to minimise the disruption and we deployed significant resources to sustain services. However, some customers experienced short-term interruptions to their water supply, leading to an ODI penalty against this performance commitment and additional costs.

The great service we have delivered for customers has been reflected in further improvement in our performance against Ofwat's measure of customer satisfaction, C-MeX. We were the top listed company, ranked fourth of the water and wastewater companies and fifth out of 17 companies overall. As a result of this performance we expect to achieve a record £3 million reward. Customer service is hugely important to us, and we are proud to be the first company ever to receive 100,000 commendations from customers through the WOW! Awards scheme, where customers provide independent, proactive feedback on the service we provide.

We look after important urban and rural landscapes and we continue to stretch ourselves to improve environmental performance, to create a greener North West. Our environmental performance this year has remained strong. We have also delivered all of our Water Industry National Environment Programme (WINEP) schemes by their planned delivery date since the beginning of AMP7, including 137 schemes in this year alone.

We have also achieved the top, 4 star rating in the Environmental Performance Assessment from the Environment Agency (EA) in five of the last seven years. This includes being assessed as an 'industry-leading' company in the most recent assessment for 2021. This was a significant achievement given that the criteria used to assess company performance becomes more challenging each year. We have consistently improved our performance when it comes to minimising pollution, having reduced the number of pollution incidents by over 50 per cent in the last decade and achieving zero serious pollution incidents in three of the last four years.

Driving a step change in river health

Communities are concerned about the country's rivers and particularly the impact of storm overflows. We have listened, understand the strength of feeling and we agree that we need to go further and faster to reduce the number of storm overflow activations.

Overflows have been a core feature of the sewer network in the UK and around the world for more than a century. We recognise that the time has come to change this and a step change is needed. Achieving this will take significant time and sustained, new investment. The North West has more rainfall and more combined sewers than elsewhere in the country, as well as a very large network. We are committed to delivering the changes needed as quickly and effectively as possible.

Last year, we announced our 'Better Rivers: Better North West' programme, supported by additional reinvestment of outperformance, to take action to improve river health across our region. We have made good progress so far and have delivered a 39 per cent reduction in reported activations compared to the 2020 baseline. This will get progressively tougher as we focus on more challenging overflows. Key to delivering this is our improvement in monitoring and operation of storm overflows. We currently monitor 97 per cent of overflows and will achieve full coverage before the end of this calendar year.

We have also won regulatory support to make an early start on our AMP8 investment. This means we expect to spend £200 million over the final two years of AMP7, making an early start on improving a third of the overflows targeted for improvement between now and 2030.

Creating a greener future

We continue to work towards our 2050 net zero ambition, underpinned by ambitious science-based targets. We are making good progress against our six carbon pledges, and have reduced our scope 1 and 2 greenhouse gas (GHG) emissions by a further 1.5 per cent this year. Our peatland restoration and woodland creation programmes help to protect water and other natural resources, support nature, and enable recreational access, as well as acting as natural carbon 'sinks' to help mitigate climate change.

We own and manage 56,000 hectares of land, which provides scope for the development of renewable and other clean technologies. Having previously delivered a portfolio of renewable assets across the North West, we are now moving to the next stage of the journey to net zero.

As an initial step, we are working on plans to develop 150 megawatts of new installed capacity by 2030. This programme could comprise a combination of solar, wind and batteries, helping to deliver emissions reductions and further improve both operating and financial resilience.

Read more about our **performance and affordability support for customers** on pages 96 to 103

Read more about our **environmental performance** on pages 84 to 95

Read more about our **carbon pledges** on page 92

(1) 50 per cent company funded, over the course of the 2020–25 regulatory period (AMP7).
(2) These are incidents affecting a customer that has already experienced a previous incident.

39%
reduction in reported activations of storm overflows since 2020 baseline

83%
performance commitments met or exceeded for the year

£25m
customer outcome delivery incentive (ODI) reward

Chief Executive Officer's review

Read more about our **financial performance** on pages 112 to 119

Read more about how we are driving **female leadership** on page 102

Financial performance

The group reported an underlying loss after tax of £9 million for the year, moving from underlying earnings per share of 53.8 pence last year to an underlying loss per share of (1.3) pence. The principal drivers of this movement were lower consumption leading to under-recovery of revenue,[3] inflationary increases in our core cost base, particularly energy and chemicals, operational incidents due to extreme weather, and a higher underlying net finance expense.

Reported profit after tax was £205 million, with reported basic earnings per share increased from (8.3) pence last year to 30.0 pence. The difference mainly reflects fair value gains on debt and derivative instruments, profit on disposal of our subsidiary United Utilities Renewable Energy Limited, and a reduction in deferred tax charge largely due to a one-off charge in the prior year to restate the brought forward deferred tax liability at the new 25 per cent future headline rate.

The rising cost of living increases the strain on customer bills and therefore cash collection. However, we have 81 per cent of household customers on direct debit and payment plans and, with the help of proactive engagement, innovative solutions and tailored assistance, we have achieved our best ever performance for cash collection. This has contributed to bad debt remaining at an all-time low of 1.8 per cent of household revenue.

We have delivered another year of good performance and, despite the income statement reflecting an underlying loss after tax, strong performance against our regulatory contract has delivered positive returns.

Return on regulated equity (RoRE) for 2022/23 was 11.0 per cent on a real, RPI/CPIH blended basis. This comprises the base return of 4.0 per cent (including our 11 basis point fast track reward), financing outperformance of 4.7 per cent, tax outperformance of 2.5 per cent, and customer ODI outperformance of 0.5 per cent, partially offset by the total expenditure (totex) impact on RoRE of minus 0.8 per cent as a result of our additional investment to improve operational and environmental performance.

Our customer ODI performance has been strong across the board and the 0.5 per cent RoRE outperformance for ODIs reflects a net reward of approximately £25 million this year – our highest annual reward to date.

Our balance sheet remains robust, our liquidity extends out to August 2025, and our gearing of 58 per cent remains comfortably within our target range of 55 to 65 per cent, supporting a solid A3 credit rating with Moody's.

[3] £41 million under-recovery against regulatory allowed revenue will be recovered in 2024/25 under the revenue control.

Supported by a talented, diverse and engaged workforce

Our colleagues are at the heart of our current and future success, and we are committed to providing a safe and great place to work. Colleague engagement has been strong this year, and at 82 per cent we scored higher than UK norm and Utilities norm benchmarks. We have recruited record levels of graduates and apprentices onto our award-winning programmes this year, and are proud that one of our own colleagues has been awarded the UK's apprentice of the year. We have also launched our new green apprenticeship scheme to recruit 100 apprentices by 2025, who will actively contribute to our environmental delivery.

The safety of our colleagues has been, and always will be, a top priority for us, and we are pleased to have delivered sustained year-on-year improvements in colleague accident frequency rates for the last five years. In recognition of our commitment to health and safety, we have been awarded the Royal Society for the Prevention of Accidents (RoSPA) gold standard medal for the 11th consecutive year.

We are ranked in the top 100 companies in the Financial Times Inclusive Leaders Index 2023, having improved on our position from last year, and are the only UK utility company in the top 100. We are recognised as one of the top 15 FTSE companies when it comes to women in leadership, having exceeded the 40 per cent target for Women on Board and Women Leaders set by the FTSE 100 Women Leaders Review.

Building an ambitious future plan

Enhanced environmental standards, population growth and climate change are driving significant new investment needs. Our plan for the next regulatory period will be submitted in October with a substantial programme of work targeting a wide range of customer service and environmental benefits.

Reducing the use of storm overflows is a key component of our plan, which proposes improvements to over 400 sites by the end of AMP8. We expect this would represent a reduction of over 70,000 activations per annum, around a 60 per cent reduction against the 2020 baseline. Our plan also includes investment to reduce phosphorous and address nutrient imbalance, delivery targets set by the Environment Act 2021, further improving river health in the North West.

Our proposed programme of work is substantially larger than we have ever delivered before, and we are already working hard to prepare and mobilise to deliver this ambitious plan. We have appointed five new area stakeholder managers, one for each county in our region, who are working on early engagement with communities and planning approval. We have also brought in additional experience and knowledge to assist colleagues in our engineering, capital delivery and commercial teams. Our supply chain will be critical, and we have appointed an AMP8 mobilisation and organisational readiness partner to ensure that we have the skills and capabilities to successfully deliver AMP8.

Our engagement with customers shows their support for investment in environmental improvements, but the recent rises in cost of living are clearly putting pressure on household budgets and a plan of this size will inevitably drive an increase in customer bills. We are challenging ourselves to embed the highest levels of efficiency into the plan and identify the best value solutions. We also recognise the need to support customers with affordability challenges and we are planning to strengthen our industry-leading affordability support package as we head into AMP8.

We are confident that our strong and resilient corporate and financial structure, together with a highly competent and engaged team, means that we are well positioned to continue to deliver for all our stakeholders in AMP8 and beyond.

Thanks to our stakeholders for their continued support

The commitment and each and every colleague within United Utilities to deliver fantastic services for customers, for the environment, and for each other is clear, and for that we say a huge thank you. Looking to the opportunities that are ahead of us in the next regulatory period and beyond, we could not have a better team to deliver on these opportunities. We also extend our thanks to customers and other stakeholders for their continued support.

Louise Beardmore

Chief Executive Officer
24 May 2023

Integrated Report and TCFD disclosure

This annual report is an Integrated Report and has been prepared and presented in accordance with the International <IR> Framework published by the International Integrated Reporting Council in January 2021. The board, which is responsible for the integrity of this report, has considered the preparation and presentation of this report and concluded that it has been prepared and presented in accordance with the Framework. This report contains all climate-related financial disclosures required to be consistent with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and in line with the Listing Rules requirements (Listing Rule 9.8.6R(8)). Further supplementary detail, such as our 2021 adaptation progress report, WRMP and supporting technical documents, are available on our website.

Materiality

Our integrated annual report and financial statements aim to meet the information needs of our investors to help them make informed decisions regarding their participation – for example, whether to buy, hold or sell our shares or bonds, whether to engage with management on issues, and how to vote their shares. We have included information that we believe is material to these decisions, which is presented in a way that we believe is fair, balanced and understandable.

We engage with – and recognise that this report will be read by – a wide variety of other stakeholders including customers, suppliers, colleagues, analysts, regulators, community bodies, politicians, non-governmental organisations, and devolved authorities. Where we believe that a topic is material to a large number of them, which is assessed in part through a matrix approach to stakeholder materiality as set out on pages 28 and 29, we either include it in this report or refer the reader to other reports and information (such as our regulatory reports, customer communications, or company web pages).

We believe this approach meets the requirements of company law, the UK Corporate Governance Code, IFRS and the International <IR> Framework, and that we go beyond those requirements where we feel it is particularly helpful to do so and where that can be done without making the report unnecessarily lengthy or difficult to read.

Our materiality assessment identifies the issues that matter most to our stakeholders and could impact our ability to create value, and this feeds into our assessment of risks and opportunities. It is through our risk management processes that we monitor and assess the specific risks that we face, their likelihood and impact, and ensure we have adequate controls and procedures in place to mitigate risks and act on opportunities.

How we provide great water for a stronger, greener and healthier North West

Our strategic priorities

- Improve our rivers
- Create a greener future
- Provide a safe and great place to work
- Deliver great service for all our customers
- Spend customers' money wisely
- Contribute to our communities

1. Collect and treat

Providing great water:
We collect raw water from open reservoirs, lakes, rivers and boreholes. We then treat it in one of our 86 water treatment works to ensure it is safe and clean for customers to drink.

For a stronger, greener and healthier North West:
We own and manage 56,000 hectares of land. We are optimising the use of this land to protect water quality, create natural carbon sinks by restoring peatland and planting woodland, and explore potential clean energy development. We manage our land and water resources in a sustainable way, protecting and enhancing local habitats, and open our land to the public to enjoy nature and its health and wellbeing benefits.

Reservoirs are the biggest source of water in the North West, and we have more than any other UK water company. They are quick to fill when it rains, but are more vulnerable to periods of dry weather than ground water sources. They provide great tasting water, but have high maintenance needs and the raw water requires more treatment than some other water sources.

Relevant material issues
- Water resources and leakage
- Drinking water quality
- Climate change
- Land management, access and recreation

Relevant principal risks
- Water service
- Supply chain and programme delivery
- Resource

2. Store and deliver

Providing great water:
The treated water goes to one of our covered storage reservoirs, ready to be delivered to customers' taps when they need it. We deliver an average of 1.8 billion litres of water every day to 7.4 million people and businesses, using 43,000 kilometres of water pipes.

For a stronger, greener and healthier North West:
Our integrated supply network enables us to move water around the region as needed. Along with production planning and optimisation of storage levels ahead of anticipated demand increases, and a fleet of alternative supply vehicles, this helps us to deliver a more resilient water supply. We use sensors and artificial intelligence, and have dedicated teams to detect and fix leaks across our pipes as well as helping customers identify leaks on their property, which can save them money on their bills as well as reducing water losses. Our Haweswater Aqueduct uses gravity to transfer water from Cumbria to Manchester, helping to reduce our carbon footprint from energy-intensive pumping.

Relevant material issues
- Water resources and leakage
- Customer service and operational performance
- Drinking water quality

Relevant principal risks
- Water service
- Supply chain and programme delivery

Retail

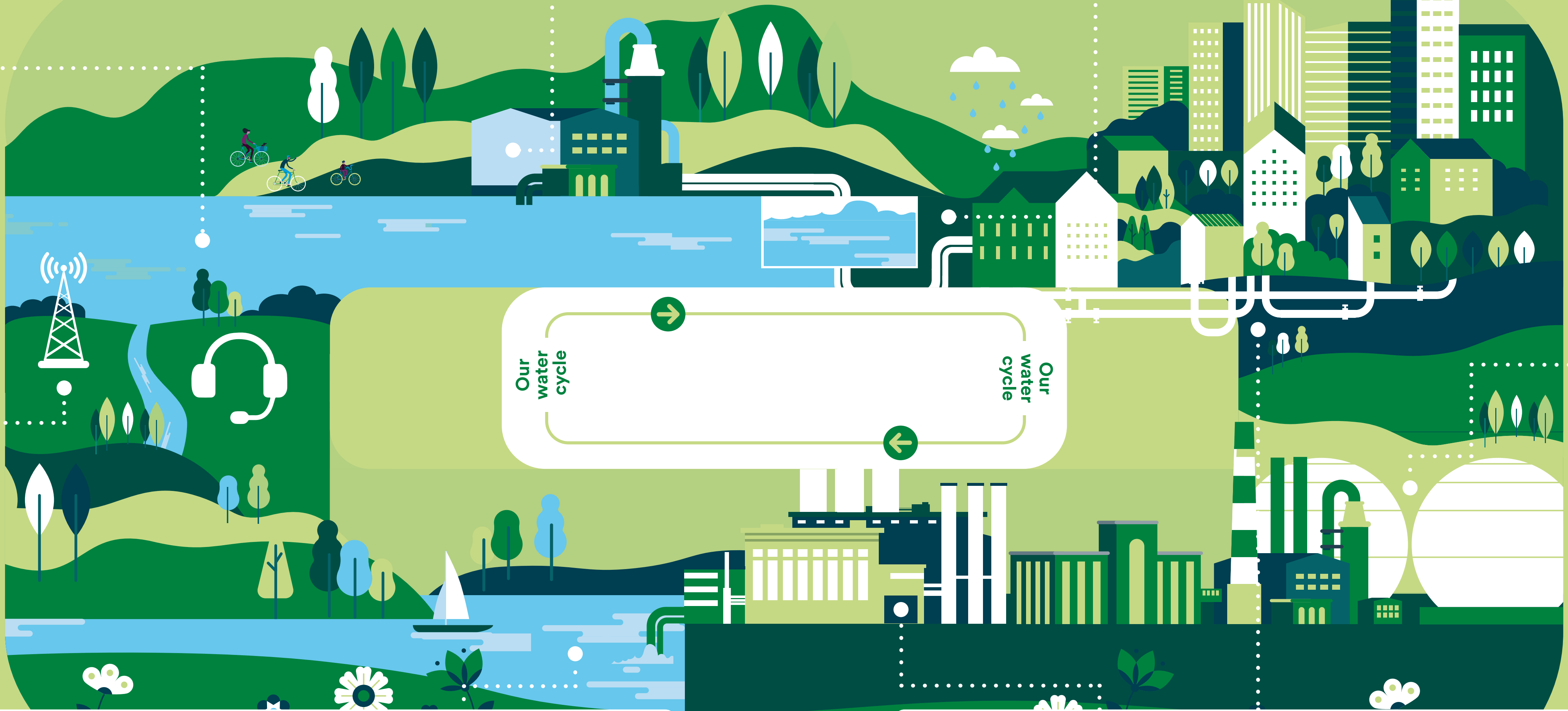
Providing great water:
United Utilities Water Ltd provides metering, billing and customer services for household customers in the North West. Business customers choose a water retailer, and our joint venture, Water Plus, operates in the competitive non-household retail market.

For a stronger, greener and healthier North West:
Our region has the most areas of extreme deprivation in the country. We have an extensive range of affordability and vulnerability schemes, and are helping more than 330,000 customers with £280 million[1] of support in AMP7.

[1] 50 per cent company funded

Relevant material issues
- Customer service and operational performance
- Affordability and vulnerability

Relevant principal risks
- Retail and commercial
- Security
- Resource



Generate

Providing great water:
We minimise waste from our operations, including by turning sludge byproduct into compost for farmers and capturing gas to generate renewable energy from bioresources.

For a stronger, greener and healthier North West:
Self-generation helps us to reduce our carbon footprint and save energy costs, and the remaining electricity needs that we purchase are 100 per cent renewable.

We are closely following the developments in the interpretation of Farming Rules for Water, and the impact this could have on our provision of compost for farmers throughout the year.

Relevant material issues
- Energy management
- Environmental impacts

Relevant principal risks
- Health, safety and environmental
- Supply chain and programme delivery
- Resource

4. Return

Providing great water:
Once the water is clean enough to meet stringent environmental consents, we return it through rivers and streams so that the water cycle can begin again.

For a stronger, greener and healthier North West:
We have a long coastline and 25 designated coastal bathing waters across the North West. We are meeting 24 of 25 standards for these bathing waters and we are industry leading in minimising pollution, with zero serious pollution incidents in three of the last four years.

We are going above and beyond our regulatory commitments to improve river health, with the commitments in our Better Rivers: Better North West programme and additional investment in the 2020–25 period to deliver improvements faster. We are recruiting a team of river rangers to help us look after the local rivers and streams in our communities, and exploring other new ways of working such as how we can work with farmers to reduce the impact of runoff, and the use of nature-based solutions and partnerships with groups such as The Rivers Trust, to ensure we are pursuing the best ways to improve the natural environment and river and bathing water quality across the region.

Relevant material issues
- Political and regulatory environment
- Natural capital and biodiversity

Relevant principal risks
- Health, safety and environmental
- Conduct and compliance

3. Remove and clean

Providing great water:
We operate 79,000 kilometres of wastewater pipes to transport wastewater from sewers to one of our 584 wastewater treatment works, where it requires separation and treatment before it is returned to the natural environment.

Combined sewers take a mix of wastewater and rainwater to be cleaned. In excessive rainfall, when sewer capacity is overloaded, storm overflows are activated, using a separate pipe to allow this heavily diluted mix to flow directly into rivers or the sea to help prevent flooding of streets, homes and businesses. Read more on page 22.

For a stronger, greener and healthier North West:
Urban rainfall in our region is 40 per cent higher than the average for the rest of England and Wales, and 54 per cent of our sewers take combined waste and rainwater, compared to an average of 33 per cent. This means more water runs into our sewers than other parts of the country, creating a much bigger challenge for reducing the use of storm overflows in the North West. We are already investing substantial amounts in AMP7, supporting our target of at least a one-third sustainable reduction in the number of overflow activations, improving 184 kilometres of rivers. Our ambitious plans for AMP8 target even more significant improvements.

Relevant material issues
- Recycling biosolids to land
- Customer service and operational performance
- Storm overflows
- Climate change

Relevant principal risks
- Wastewater service
- Political and regulatory
- Health, safety and environmental
- Supply chain and programme delivery

Read more about our material issues on pages 28 to 33 and our principal risks on pages 64 and 65

Our business model

How our approach generates value for a broad range of stakeholders

Our environment and the resources we rely upon

Our external environment

What we do and how we do it is influenced by a number of factors external to our business, all of which must be considered and managed. We monitor developments and trends in our external environment and adapt our plans as needed to respond.

Political environment

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

Natural environment

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

Economic environment

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

Regulatory environment

Regulators set minimum standards for customer service, drinking water and environmental performance, and market reform can drive change in the long term.

Technology and innovation

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

Stakeholders

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

Key resources

We are reliant on each of the six capitals to deliver our purpose, and we strive to have a positive impact on those capitals through our activities in order to support our ongoing relationship with those for mutual benefit in the long term.

Natural capital

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

Manufactured capital

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

Intellectual capital

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

Human capital

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

Social capital

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

Financial capital

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

Our approach to generating value

Strategy

Our six strategic priorities help us deliver our purpose and drive sustainable long-term improvements for customers, the environment and society, at an efficient cost. We use adaptive planning across short, medium and long-term horizons to ensure flexibility and resilience.

Key differentiators

- Our rigorous planning over multiple horizons
- Our multi-stakeholder approach to value creation

Governance

We are committed to responsible business, factoring ESG matters and stakeholder priorities into decision-making at all levels of the business, and executive remuneration is linked to performance against customer, environmental and financial targets.

Key differentiators

- Our integrated thinking
- Our diverse and inclusive culture
- Our holistic remuneration approach

Risks and opportunities

We have a robust framework for identifying, assessing and managing risks and opportunities, with regular monitoring as well as longer-term plans to enhance our resilience to climate change. Our pioneering Systems Thinking approach and culture of innovation help us to maximise opportunities to work better, safer, and more efficiently.

Key differentiators

- Our pioneering Systems Thinking approach
- Our culture of innovation

Metrics and targets

We monitor and measure our performance against a range of operational metrics for each of the stakeholders we create value for, as well as financial metrics covering the income statement, balance sheet, and investor returns.

Key differentiators

- Our multi-stakeholder value creation approach
- Our strong credit ratings and low dependency pension schemes with no pension deficit

Building a stronger, greener and healthier North West

We deliver our water and wastewater services responsibly and sustainably, which supports long-term value creation for all our stakeholders.

Stronger Greener Healthier

Customers

- Continually improving service at an efficient cost to deliver best value for money
- Supporting thousands of vulnerable customers through a wide range of assistance schemes

Customer satisfaction: **4th** ranked water and sewerage company in England and Wales

Affordability: **£280m[1]** support for customers over 2020–25

[1] 50% company funded

Environment

- Reducing our environmental impact
- Protecting and enhancing reservoirs, catchments, rivers and bathing waters that provide a home for wildlife, areas for recreation, and a major pull for tourism

River health: **39%** reduction in reported overflow activations since 2020

Carbon emissions: **3.6%** reduction since 2020 (scope 1 and 2)

Colleagues

- Attracting, developing and retaining a diverse team
- Looking after health, safety and wellbeing
- Paying the Living Wage and having a secure pension provision

Engagement: **82%** higher than UK norm and Utilities norm benchmarks

Pension schemes: **£nil** deficit, fully funded on a low dependency basis

Communities

- Building partnerships
- Working with schools and young people to develop skills and help people get back to work
- Opening our land to the public and encouraging people to use it responsibly

Community investment: **£2.88m** invested in the community

Total taxes paid: **£229m** contributing towards public finances

Suppliers

- Investing in the North West's infrastructure and generating jobs, skills and income in the local economy through our capital programme
- Acting fairly and transparently and adhering to the Prompt Payment Code

99% of invoices paid within 60 days or less

Jobs supported: **22,700** across the value chain through our work

Investors

- Managing risk prudently and providing an appropriate return, investing in our assets for growth and resilience
- With pension funds and charities among our investors, millions rely on the income we provide

Return on regulated equity (RoRE): **11.0%** outperforming the base return of 4%

Dividend: **45.51p** per share for 2022/23, increased in line with CPIH inflation

Our external environment

Storm overflows

Storm overflows, which includes combined sewer overflows (CSOs) and storm tank discharges, have been an important part of the sewerage network for over 150 years, acting as the catch-all last defence for managing surface water in our communities. This needs to change.

In normal conditions sewage, mixed with rainwater in wet weather, transits through our wastewater treatment works, and only treated water is returned to the natural environment. If the flow is too much for the works to deal with, it is usually stored in tanks until the incoming flows have returned to normal levels. Then the tanks are emptied and the water is treated.

Our sewers are typically no more than 15 per cent full in dry conditions but, when rainfall is very heavy and the tanks fill to capacity, overflows act as a pressure relief valve allowing rainwater, mixed with sewage, to rise inside the sewer and eventually enter a separate pipe which flows into a river or the sea. Sewers operate this way to help prevent the flooding of streets, homes and businesses.

The North West has:

- A significantly higher proportion of combined sewers, receiving a mix of rainwater and sewage, than any other water company;
- 28 per cent higher annual rainfall than the average for England and Wales, so considerably more rainwater entering our sewers; and
- 25 per cent more overflows than the industry average.

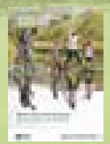
When overflows are activated they can sometimes temporarily affect river and bathing water quality. With more extreme rainfall events and significant population growth expected over the next 25 years, more foul and rainwater will be entering our sewers, and the need for overflows would increase if left unaddressed.

We understand and share concerns around this and we are committed to driving a step-change. This will not happen overnight. It is a long-term plan that will need a fundamental re-plumb of the region's sewer system, moving us away from the use of combined storm pipes and creating new ways of dealing with excess wastewater at times of heavy rainfall.

We have made a fast start to a very ambitious plan that is already delivering improvement, and we are keen to go further faster, as discussed on page 15.

54%

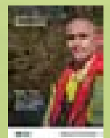
combined sewers in the North West compared to 33% industry average, with some urban centres even higher, for example Liverpool has 84%



Storm overflow report 2022

We released a report in 2022 discussing the issue of storm overflows and our plans to reduce their use.

Visit our online report at unitedutilities.com/globalassets/documents/pdf/united-utilities-storm-overflow.pdf



Better Rivers report 2023

We released a report in 2023 detailing progress against the commitments in our Better Rivers: Better North West plan.

Visit our online report at unitedutilities.com/globalassets/documents/corporate-documents/united-utilities-better-rivers-report-2023.pdf

Video from our CEO

Louise Beardmore talks about the issue with storm overflows and how we plan to tackle it.

Watch the video at unitedutilities.com/corporate/responsibility/environment/reducing-pollution/storm-overflows

Political environment

Political decisions have the potential to impact on our operations. We engage with politicians and other policymakers to understand developments, influence where possible, and stay flexible to adapt as needed.

Key trends

Reducing the use of storm overflows

Recognising the need to act on storm overflows, the Government set out a discharge reduction plan in the Environment Act 2021. We are already investing significant amounts in AMP7 to improve the quality of rivers and seas in the North West, including £230 million leading to improvements to 184 kilometres of watercourses and supporting a sustainable one-third reduction in activations of overflows. Transparency is key and we have committed to achieve 100 per cent monitoring of storm overflows before the end of 2023, with 97 per cent already monitored.

We have ambitious plans for reducing activations of storm overflows in AMP8 as part an environmental improvement programme that is significantly larger than any we have ever delivered, and we have provisional approval from regulators to accelerate around £200 million of investment into the next two years, the majority of which relates to this.

Phosphorus reduction and nutrient neutrality

As well as addressing the use of overflows, the Environment Act also sets obligations to reduce phosphorus and address nutrient imbalance, which are reflected in our AMP8 investment plans.

National social tariff

Additional cost of living pressures on households across the country is putting the focus on government and companies to do more to help those struggling to pay. We are a strong supporter of the Consumer Council for Water's drive to launch a national social tariff so water customers across the country are not reliant on the current postcode lottery.

Devolved regional plans

We have a part to play in the plans of devolved regions and mayors for growth and green energy development in the North West, including our diversions activity to support HS2.

Link to principal risks

- Wastewater service
- Health, safety and environmental
- Political and regulatory

Read more on pages 64 to 65

Link to material issues

- Trust, transparency and legitimacy
- Political and regulatory environment
- Storm overflows

Read more on pages 28 to 29

Our external environment

Natural environment

28%

more rainfall in the North West than average across England and Wales

34%

of our region is National Park, Area of Outstanding Natural Beauty or a Site of Special Scientific Interest

The natural environment is constantly changing. We must adapt and prepare for these challenges, minimising our impact to help mitigate climate change and support a healthy water cycle.

Key trends

Climate change

We are already seeing prolonged dry periods and hotter summers, wetter winters and more extreme rainfall events, and the challenges created by freezing temperatures followed by rapid thawing. This increases the level of risk for water sufficiency, flooding and pipe damage. The dry weather and high temperatures last summer put much of the country's water supplies under stress, and in December we experienced a severe freeze-thaw event that put services under pressure. With these trends set to continue, we must plan well into the future and continually adapt to strengthen our operational resilience. We have detailed long-term plans for managing water resources, drainage and wastewater management, and are updating our drought plan. We have an adaptation report setting out how we will adapt to meet the challenges of climate change and are developing our plans to transition to a low-carbon economy.

Population growth

We will need to extend our services and ensure we have sufficient resources to meet the increased demand of an anticipated one-million increase in population by 2050.

Natural capital and biodiversity

Much of the landscape in the North West is legally protected for its environmental or cultural significance. The functioning of these natural environments is important to support communities and the regional economy, but they face pressure from climate change and population growth. We have a role to play in restoring healthy and resilient ecosystems, and need to work collaboratively with like-minded organisations to deliver nature-based solutions that offer many benefits including carbon sequestration, cleaner water, and improved biodiversity.

Link to principal risks

- Water service
- Wastewater service
- Health, safety and environmental

Read more on pages 64 to 65

Link to material issues

- Climate change
- Water resources and leakage
- Natural capital and biodiversity

Read more on pages 28 to 29

£280m

support provided to vulnerable customers over 2020–25 (50% company funded)

Economic environment

Economic and financial market conditions affect our business in various ways. Our costs are impacted by trends in inflation and interest rates, and the economic environment can impact customers' ability to pay their bills.

Key trends

Inflation and interest rate increases

Inflation has been rising sharply, reaching highs not seen for over 40 years. While the peak is believed by many to have passed, rates are still very high, and this has driven government decisions to raise interest rates as well. The impacts of these market trends on our business are complex, with significant cost increases partly offset by increased allowances under the regulatory mechanism. Our activities are energy and chemical-intensive, so we are particularly impacted by the sharp rises we have seen in these costs, and 55 per cent of our debt is in index-linked form and therefore impacted by inflation. We have increased wages with consideration to inflation, and our AMP7 dividend policy is growth in line with CPIH inflation to 2025. It is worth noting, however, that our regulatory capital value rises with inflation, we have £3 billion of fixed-rate debt that increases in benefit as interest rates rise and, unlike many, our low dependency pension schemes are protected from market rate movements.

Cost of living crisis

Inflationary cost increases have a big impact on customers, and the country is experiencing a cost of living crisis with many households really struggling. It is typically the most deprived communities that are hit the hardest, and we have more in the North West than any other region, which makes the industry-leading affordability support we provide to customers even more critical.

Link to principal risks

- Retail and commercial
- Supply chain and programme delivery
- Finance

Read more on pages 64 to 65

Link to material issues

- Affordability and vulnerability
- Financial risk management
- North West regional economy

Read more on pages 28 to 29

Our external environment

Technology and innovation

New technologies and innovative ideas present opportunities for us to adapt the way we work to make things better, faster, safer and cheaper, but technology can also create risks such as the threat of cyber attacks.

Key trends

Artificial intelligence bolstering our Systems Thinking approach

The use of AI and machine learning has potential to improve infrastructure performance and management. Our Systems Thinking approach involves remote monitoring and control, taking a 'whole system' view of our network and assets, and proactive and preventative optimisation to spot and resolve issues before they impact customers. At the higher maturity levels we use AI to optimise the way we operate.

Cyber security

Protecting infrastructure assets, customer information and commercial data from malicious activity is now a reality of the modern world. The global political situation in recent years with rising tensions between Russia and the West has added to the evolving threats. It is critical that we maintain a stringent approach to cyber security that evolves with new technological advances.

Customer expectations

In an increasingly digital world, customers expect more from services than ever before. Technology has changed the way customers can get in touch with companies to access their bills, update their information and receive updates on services and support. As customer expectations change, we need to evolve our own services to ensure we meet those expectations.

Sensors

across our network provide real-time data, helping us detect and proactively fix leaks and blockages

Link to principal risks

- Security
- Retail and commercial
- Conduct and compliance

Read more on pages 64 to 65

Link to material issues

- Customer service and operational performance
- Cyber security
- Data security

Read more on pages 28 to 29

5-year

regulatory cycles, known as AMPs

>£50bn

allowance across the industry to deliver further improvements over the 2020–25 period

Regulatory environment

Sustainable business means continually planning and preparing for future service improvements and potential market reforms, as well as meeting current regulatory commitments.

Key trends

Current performance and preparations for AMP8

We are subject to regulation of price and performance by various bodies, as set out in the diagram, that protect the interests of customers and the environment and perform comparative assessments of companies' performance. We must balance incentives and requirements that can sometimes act in tension, such as the desire for rapid environmental improvements and the upward pressure this can place on customers' bills. We maintain constructive dialogue to agree commitments for improvement.

The water industry national environment programme (WINEP) sets out the actions needed to meet environmental obligations, the DWI can put in place programmes of work to improve drinking water quality, and companies must prepare and maintain long-term plans for managing water resources (WRMP) and drainage and wastewater (DWMP). Ofwat sets each company's final determination (FD) detailing revenue, required service levels, and the incentive package for five-year asset management plans (AMPs). Performance against the FD is reported in an annual performance report (APR). 2022/23 was the third year in AMP7, and in October we will submit our plan for the 2025–30 period (AMP8).

Future market reform

There is a constant need to engage and monitor developments across all stages of the regulatory cycle, feeding into consultations on potential future market reforms for our industry.

* Partnership made up of Ofwat, the Environment Agency and DWI.

Link to principal risks

- Conduct and compliance
- Political and regulatory

Read more on pages 64 to 65

Link to material issues

- Trust, transparency and legitimacy
- Political and regulatory environment
- Competitive markets

Read more on pages 28 to 29

Our external environment

Stakeholders

As set out on page 01, there are many stakeholders who take an interest in the water industry, its role in society, and the North West region. Our decision-making considers the need to balance the often conflicting priorities of these stakeholders.

It is important that we understand what matters to our stakeholders and develop constructive relationships built on mutual trust. The nature of our work means we are at the heart of communities across the North West region. We interact with a large variety of stakeholders, from communities and environmental interest bodies to suppliers and regulators.

Stakeholder views and priorities are factored into our decision-making

We engage with stakeholders to understand their views and priorities.

Read more about how we engage with stakeholders on pages 56 to 57.

These views are factored into strategic decision-making at board level, as set out in our S172(1) Statement on pages 58 to 59. They also feed into our materiality assessment, which gives rise to the material issues matrix on page 29, and this in turn feeds into our assessment of risks and opportunities, as set out on pages 60 to 75.

Stakeholder materiality assessment

We consider stakeholder priorities alongside our own assessment of what has the biggest impact on the company and its ability to create value. We then present the output in a material issues matrix, which can be found on the next page.

This informs decisions about what we report in documents such as this. Setting out issues in this way helps to ensure we understand key stakeholder priorities and are able to consider their interests in strategic decision-making, helping us to create long-term value.

In defining the strategic relevance of an issue to the company, we have adopted the integrated reporting <IR> framework definition of materiality, which states:

"a matter is material if it could substantively affect the organisation's ability to create value in the short, medium or long term"

Value, in this context, may be created internally (for the company and/or colleagues) and/or created externally (for customers, the environment, communities, investors, and suppliers). Value may be financial or non-financial. We view this approach as consistent with the emerging concept of double materiality.

2022/23 assessment of material issues

Last year we carried out a thorough review of our material issues and matrix design. Striking the right balance between different interests and views is not easy but our assessment process consolidated feedback based on a balance of views obtained from all our stakeholders.

This year we have completed a light touch review of our material issues, approved by senior management. Storm overflows has increased in significance while COVID-19 has decreased in significance as the country recovers from the pandemic. These moves are reflected in this year's matrix.

Based on current best practice of reviewing material issues every two years, we will undertake a full materiality assessment in the coming year.

The assessment process identified 28 material issues. More information about the most material issues can be found on the following pages. We describe the issue, provide our response to managing the issue, explain how the issue links to our strategic priorities and how it is included in our plans for the future.

Read more about how SDGs link to our material issues on pages 78 to 79

Read more about how six capitals link to our material issues on pages 34 to 37

Our materiality assessment process

1 Define
We reviewed current best practice in materiality reporting. The assessment criteria for stakeholder interest and our ability to create value was confirmed. Building on our existing matrix we brought in more stakeholder views and evolved the matrix design. We committed to provide more detailed commentary on the most material issues.

2 Engage
Views were obtained from across all our stakeholder groups. Insight from consultations and data was made available through the engagement processes described on pages 56 to 57. Key internal subject matter experts and stakeholder relationship managers provided further insight on issues.

3 Assess
Comments and data were drawn together to form an initial view of the issues. The rationale for issue selection and its significance was presented to senior management for discussion. This included potential new issues, removal of issues and movement of existing issues.

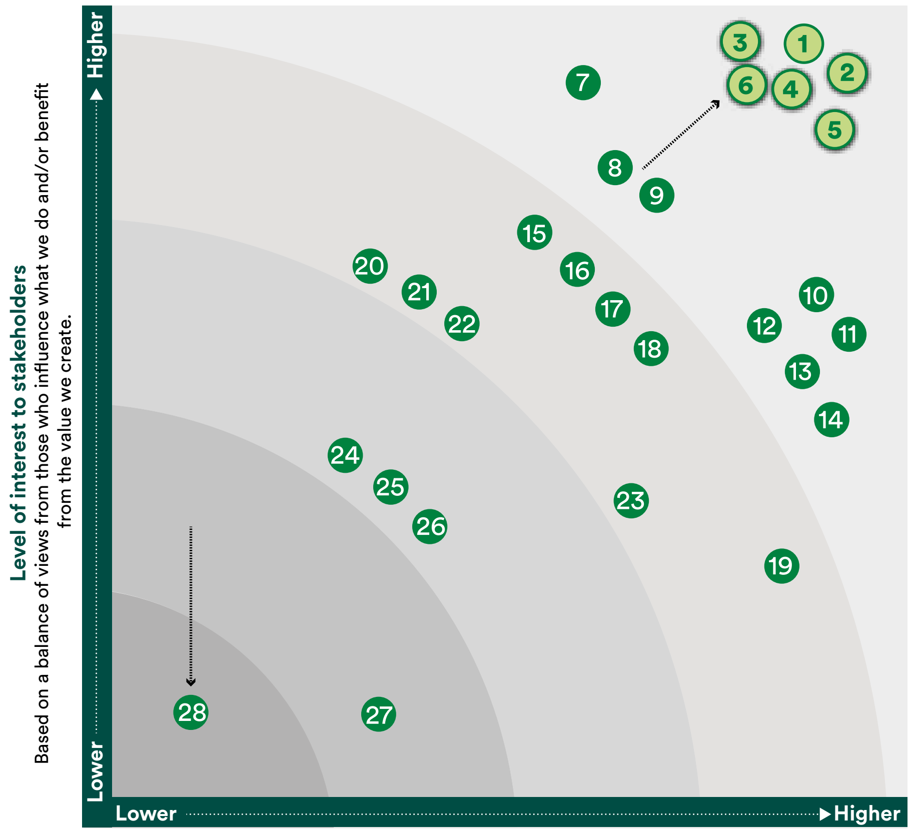
4 Align
We cross-referenced and aligned identified issues with our principal risks and uncertainties, as set out on pages 64 to 65. Matrix visuals were then created to easily communicate the prioritisation of issues. For the first time an indication of how issues have moved since the previous review has been included.

Materiality matrix

Issues are plotted on the matrix from lower to higher in terms of level of interest to stakeholders and how much it can affect our ability to create value. The most material issues are highlighted in light green.

Independent review

Our 2021/22 approach was reviewed by responsible business consultancy Corporate Citizenship, which commented that "United Utilities has set out the orderly, balanced and comprehensive process by which it has arrived at its refreshed materiality assessment. The detailed coverage of the six most material issues fosters public understanding. It sets out the links to strategic priorities, risks and future actions. It shows how United Utilities recognises the most important issues and acts upon them."



Key:
↗ Movement based on significance

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

Material Issue	Material Issue
1 Trust, transparency and legitimacy	15 Health, safety and wellbeing
2 Resilience	16 North West regional economy
3 Customer service and operational performance	17 Land management, access and recreation
4 Climate change	18 Sewage sludge to land
5 Political and regulatory environment	19 Energy management
6 Storm overflows	20 Environmental impacts
7 Affordability and vulnerability	21 Data security
8 Drinking water quality	22 Diverse and skilled workforce
9 Water resources and leakage	23 Responsible supply chain
10 Financial risk management	24 Colleague engagement
11 Corporate governance and business conduct	25 Supporting communities
12 Natural capital and biodiversity	26 Competitive markets
13 Innovation	27 Human rights
14 Cyber security	28 COVID-19

Our external environment

Material issues, key trends, and risks and opportunities

Key ESG trends identified in our external environment feed into our materiality assessment. They are assessed on stakeholder interest and their impact on our ability to create value. Our materiality assessment identifies broad issues, and then it is through our risk management that we identify, monitor and assess the specific risks and opportunities that we face, their likelihood and impact, and ensure we have adequate controls and processes in place to mitigate risks and act on opportunities.

The following examples demonstrate how key trends, material issues, and risks and opportunities are all interconnected.

Climate change

Key trends: Climate change will affect the natural environment, with adaptation needed to cope with more frequent periods of extreme weather – and mitigation needed to help minimise the long-term impact on our business and on the world as a whole.

Material issues: Our business is so intrinsically linked to the natural environment that climate change has wide-reaching impacts on several of our material issues, including resilience, sewer flooding and storm overflows, water resources and leakage, and energy management, as well as being a material issue in its own right.

Risks and opportunities: Climate change permeates several of our principal risks, including the top two – water and wastewater service. It is a common causal theme, and three of our top event-based risks are related to climate change – sewer flooding, water sufficiency, and carbon commitments. National water trading presents an opportunity to help with the national strategy for managing drought risk, given the higher rainfall we receive in the North West, and this may create opportunities to increase our water resilience.

Storm overflows

Key trends: Communities are concerned about the impact of storm overflow activations on river health across the country, and we agree that it is time to deliver a step change. Reducing activations of overflows will form a large part of our investment plans for AMP8, and we have already begun accelerating expenditure to make a fast start on this.

Material issues: It is not surprising, given the huge interest this topic has received recently, that sewer flooding and storm overflows is one of our material issues. It feeds into environmental impacts as well, and sentiment shows that it is an area in which the industry needs to renew public trust – the number one material issue.

Risks and opportunities: The requirement to reduce the frequency of storm overflow activations came out of the Environment Act so this was an element of political and regulatory risk. The use of storm overflows plays into wastewater service risk and health safety and environmental risk, as well as the sewer flooding event-based risk. Delivering the required reductions will take significant investment, and therefore this is also connected with supply chain and programme delivery risk, and finance risk. Clearly this new driver of investment creates an opportunity for us to deliver further improvements to river quality in the North West.

Affordability

Key trends: The economic climate and the cost of living crisis it has created has implications on customer affordability. Discussions around a potential national social tariff could help customers across the country access a fair share of affordability support that is not dependent on the willingness and ability of others in their specific region to contribute towards that support.

Material issues: Affordability and vulnerability is one of the top six material issues, and the North West regional economy has clear implications on affordability for customers in our region. The political and regulatory environment will determine appetite for a national social tariff, which could have a positive impact on affordability for vulnerable customers across the whole country.

Risks and opportunities: Customer affordability is part of retail and commercial risk, and the national social tariff decision presents either a risk or an opportunity with respect to affordability support for customers in the North West.

Regulatory developments

Key trends: Preparations for AMP8 and the potential for future market reform are key trends in the regulatory environment.

Material issues: The political and regulatory environment is one of the material issues identified, and the preparations for AMP8 and commitments that will be set within our final determination in 2024 will have implications for customer service and operational performance in coming years. Competitive markets was an outcome of previous market reform for the non-household retail market, and is a potential subject of future reforms.

Risks and opportunities: Political and regulatory risk is one of our top ten principal risks, and legislative and regulatory change is identified as a common causal theme of event-based risks such as the price review 2024 outcome (for AMP8). The Environment Agency's interpretation of Farming Rules for Water is a driver of the event-based risk around recycling of biosolids to agriculture.

Technology and innovation

Key trends: The emergence of artificial intelligence, Systems Thinking capabilities, and the threats to cyber security are key trends in the technological environment.

Material issues: Innovation is identified as one of the material issues, and our ability to capitalise on new technologies and innovations has potential benefits for as customer service and operational performance, and health, safety and wellbeing. However, with greater use of technology comes greater security risk, in terms of both cyber and data security issues.

Risks and opportunities: Technology presents cyber security risks, identified within principal risks and as an event-based risk, as well as resource risk, as we are reliant on skilled staff and must train them in emerging technologies. Innovation is a key source of opportunity, through further development of our Systems Thinking approach, and identification of new and better ways of working. The ability to bid for innovation funding through our regulatory framework also presents an opportunity.

Our external environment

Responding to the most material issues

Understanding and responding to the most material issues affecting our business is key to delivering our purpose. Addressing these issues in our short, medium and long-term planning ensures we are responding to the things that matter most to our business and our stakeholders.

1 Trust, transparency and legitimacy

Being open, honest and transparent is key to building and maintaining trust and legitimacy. As well as reporting openly, this means setting out commitments and delivering on them. Our stakeholders want to know that we are treating colleagues fairly, protecting customer data, and paying our fair amount of tax as part of growing calls for companies to demonstrate how they are contributing to society as a whole and operating in the public interest.

In recent years, the UK water sector has faced challenges to its legitimacy, amplified by the ongoing industry-wide investigations by Ofwat and the Environment Agency into possible unpermitted sewage discharges. Consequently, trust has been eroded and questions raised about the ownership structure of the sector, dividends and links between performance and reward. Ofwat has called for further transparency and disclosure and demonstration of companies' contribution to public value.

Our response

Being open about our purpose and transparent about how we are delivering for all of our stakeholders is key. We aim to maintain high ethical standards of business conduct and corporate governance. We apply best practice against our corporate and regulatory reporting, linking performance to remuneration.

We have open and transparent reporting around all of our equity and debt financing arrangements, do not use offshore financing vehicles, and we have secured the Fair Tax Mark independent certification since 2019.

We maintain a comprehensive set of policies, linked to and including, human rights, modern slavery and whistleblowing.

Cybercrime is a threat we take very seriously through our policies and dedicated data protection team protecting customer information.

We work with suppliers and contractors whose principles, conduct and standards align with our own. Our key suppliers have committed to our United Supply Chain approach. We are a signatory to the Prompt Payment Code, and fully comply with rules on reporting payments to suppliers.

2 Resilience

Resilience is a broad and interconnected topic. A resilient company will embed resilience throughout its operations, financing and corporate systems of governance and control.

Providing essential services to customers requires long-term planning to manage future challenges, such as population growth and climate change, to ensure they are provided effectively to meet increasing expectations.

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

Companies need to have the right people and skills for the modern digital world. Increasingly, stakeholders are interested in the ability of an organisation's governance and assurance processes to help avoid, cope with and recover from disruption and to anticipate trends and variability in all aspects of their business.

Our response

It can take many years and require substantial investment to increase the resilience of existing assets or build new ones, which is why our long-term planning is so important. We have detailed plans in place to anticipate and prepare for future challenges. We build these needs into our business plans for each five-year regulatory period to anticipate the future funding we need to allocate in order to act at the right time.

We have a strong balance sheet, a secure pension position, and take a prudent approach to financial risk management, which delivers long-term resilience to financial shocks. As a public listed company, we consistently adhere to the highest levels of governance, accountability and assurance. We have a robust risk management framework for the identification, assessment and mitigation of risk.

We maintain good relationships with colleagues, and their representatives, and we continually strive to build diversity across our business. We build skills resilience internally through training and development, including digital skills, and award-winning graduate and apprentice schemes.

3 Customer service and operational performance

In an increasingly digitised and instant economy, customers expect more from services than ever before. This includes the water sector, with high expectations for the reliability and responsiveness of services.

Increased appreciation of the environment from stakeholders brings greater focus on the operational performance of companies that rely and impact on the environment.

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

Many of our assets are ageing compared to other utilities. To meet the expectations of customers and regulators, it is critical that we combine modern technology into our networks and management of customer service.

Our response

Delivering our purpose is reliant on good operational and customer performance. Our pollution incident reduction plan and reinvestment of regulatory outperformance has improved our environmental performance.

We have improved customer service provision through both traditional and digital channels, measuring ourselves against key external benchmarks. We have an enhanced social media presence to respond quickly to stakeholders with over one million customers engaging with us digitally. This is alongside making new services available to customers, such as 'Get Water Fit', which is helping customers learn more about their water usage.

Our culture of innovation and Systems Thinking drives us to adapt our assets and the way we operate to use modern technology and the best new ways of working.

We monitor the performance and health of our assets, with the help of sensors across the network, and this allows us to be proactive. For example, by monitoring pressure in the water network we can spot issues and fix them before we get a burst, saving costs and sparing customers the impact.

4 Climate change

Greenhouse gas emissions and how they are affecting the earth's climate is important to many stakeholders. There is a growing expectation on companies, across all sectors, to take action to reduce their greenhouse gas emissions and to adapt to the impacts of climate change.

Weather is fundamental to the delivery of water and wastewater services, and so climate change will always be of strategic and operational importance to the water sector and its stakeholders. Already, we are seeing the effects of climate change on the North West's weather, with increasing summer temperatures, wetter winters and more extreme rainfall events. With these trends set to continue, unless we take action there will be increasing impact on the services we provide to the communities we serve.

Companies must plan well into the future to understand what changes are likely to occur, and continually adapt to meet the risks and opportunities this presents.

Our response

Our response to climate change risk involves mitigation (minimising our greenhouse gas emissions) and adaptation (ensuring our services are resilient to a changing climate). Where practical, we generate renewable energy on our sites, for example, through the use of bioresources at wastewater treatment works, helping to reduce our emissions. We have reduced our carbon footprint considerably since 2005/06 and have set ambitious science-based targets as part of our continued efforts to reduce emissions. We have committed to six pledges to help us achieve significant further reductions in emissions and have linked the long-term incentive outcomes for our executives to these.

We have detailed plans, such as the 25-year Water Resources Management Plan and Drainage and Wastewater Management Plan, that set out how we will adapt our services to meet the challenges of climate change with key authorities across the region.

We have reported against the recommendations of the Task Force on Climate-related Financial Disclosures for the past four years to provide transparency of our approach.

5 Political and regulatory environment

The UK Government's current goal is to be the first generation to leave the environment in a better state than we found it. The Environment Act, which became law in 2021, includes commitments to improve water management, and the water sector has a leading role to play to implement its requirements. This will drive significant increases in investment, putting unwelcome upward pressure on customers' bills.

Environmental and quality regulators set stringent consents for water company activities to ensure the environment and water quality are protected. In meeting these obligations, companies need to work hard to maintain compliance. This requires striking a balance with other environmental impacts, such as the use of natural resources and emissions of greenhouse gases. Read more about our regulators on page 27.

Our response

We welcome the Environment Act and the inclusion of aspects relating to storm overflows. Many of our Better Rivers pledges will be delivered by 2025, including investment in wastewater systems, enhanced data monitoring and sharing, greater innovation and more use of nature-based solutions.

The Environment Agency assesses water companies' performance across a basket of measures, and we are one of the best-performing companies over the last six years. Our regulatory framework shapes our interaction with the environment, and we work with our environmental regulators to agree long-term plans.

Alongside this, we need to deliver other core regulatory obligations – such as those set out by Ofwat – and compliance with ever increasing drinking water quality standards. Our Water Quality First programme has improved our performance and reputation with the DWI.

A phased, long-term approach to address the concerns and interests of stakeholders, including environmental regulators, ensures that the necessary work can be delivered, while providing support for those who would otherwise find bills unaffordable, spreading some of the spend over several years.

6 Storm overflows

Storm overflows have been part of the sewerage network for decades. When rainfall exceeds the capacity of our sewers, treatment works and storm tanks, overflows are activated allowing rainwater, mixed with sewage, to enter a separate pipe that flows into a river or the sea. This acts as a pressure relief valve, helping to prevent the flooding of streets, homes and businesses.

There has been increased public, political and regulatory interest in the usage of storm overflows across the country over the past year. Many people have told us they do not like the idea of untreated sewage going into our rivers and seas, no matter how diluted, and we understand and share these concerns.

We are developing plans to deliver a significant reduction in the number of activations of overflows in the North West.

Our response

Last year, we announced our Better Rivers: Better North West plan to take action to improve river health across our region. We have made good progress so far and have delivered a 39 per cent reduction in reported activations since 2020.

We have draft approval from regulators to accelerate around £900 million of investment, with £200 million of this expected to be delivered in the next two years, most of which relates to reducing overflow activations. This means we go further and faster.

The Environment Agency requires all water companies to fit monitors to their storm overflows to capture information on how they are performing. 97 per cent of the North West's storm overflows are now monitored and we will achieve 100 per cent by the end of 2023. We now have a greater understanding of our region's vast 79,000 kilometre wastewater system than at any point in history, providing a rich source of data to assess and inform activity to improve the system.

We are committed to being open about our performance and plans, to keep stakeholders engaged and collaborate on solutions. In 2022, we held our first Environmental AGM and published our Better Rivers report to give an insight into how we are progressing on our commitments.

The six capitals

To deliver our purpose we are reliant on a broad range of resources. We use the internationally regarded concept of the six capitals to define our key resources, and to help us manage our impacts and dependencies.

Our relationship with the six capitals is not one-way. Much as their availability and quality have an impact on our business, our activities also have an impact on the capitals, and this can be positive or negative. As a regulated water and wastewater company that continuously relies on, and interacts with, nature and society to deliver our purpose, it is especially helpful to consider and manage our key resources through the six capitals framework to ensure we maximise the positive impact we can have.

The following three pages explore the ways that we depend and impact on each of the capitals, and how we manage them to ensure long-term resilience and value creation.

To better understand and manage these important interactions, we are creating a six capitals account. This approach is based on the premise that traditional financial accounting doesn't show the full picture. We rely on things that are not on our balance sheet, like our people and the environment, and we have an impact on things that have no associated income statement or cash flow value. Six capitals accounting aims to close that gap by accounting for these non-financial elements, which would be viewed alongside our financial information, to give a fuller picture of our impacts and dependencies.

We are in the process of integrating six capitals thinking into all our business processes and planning, including taking a multi-capital value approach to the formation of our business plan for the 2025–30 period.

This expands on the natural capital accounting method we have previously used, and will provide a fuller picture of the two-way value transfer between the business and each of the capitals, and the consequences of different strategic options, to better inform our decision-making and help us create and protect value for all of our stakeholders.

Performance can also be monitored and assessed by reference to the positive and negative impacts on these six capitals, and this is already well aligned to the way we monitor our performance by reference to value creation for our six stakeholder groups as well as financial performance – with strong alignment between these stakeholders and the capitals. The six capitals accounting will help us identify any other areas that are worth adding to the way we manage and assess our performance.

Natural capital

This includes the renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current or future prosperity of an organisation. This includes air, water, land, minerals and forests as well as biodiversity and ecosystem health. For example, we rely on water sources, such as reservoirs, rivers and boreholes, to supply water to customers and face risks from severe dry weather, when we must manage resilience of water supply.

How we manage this key resource

Much of the water we abstract originates on land before running off into water. We are stewards of large areas of this land, much of which is managed by tenant farmers or in partnership. We ensure it is well managed to improve water quality and help protect habitats.

We plan and invest for the long term to ensure we have resilient water resources. In the short term, we can bring more supplies online to meet demand, and our integrated supply zone allows us to move water efficiently around the region. We also encourage customers to use water more efficiently with tips, free water-saving devices, and metering initiatives.

Water can also cause issues, when rainfall exceeds the capacity of sewers resulting in heavily diluted wastewater being released directly to the environment to minimise the risk of sewer flooding in streets or people's homes. We need to reduce the use of storm overflows, so we must find alternative ways to cope with excess surface water while avoiding flooding. Traditional interventions, such as storage tanks and enlarging sewers, are costly, carbon intensive and subject to space constraints. We are innovating with sustainable drainage and other nature-based solutions that use the urban and rural environment as part of the solution.

We manage the waste from our activities, including sludge, in a sustainable way, with the vast majority going to beneficial use such as recycling or fertiliser for land.

We depend on natural capital to:

- store and clean water that we take to treatment and then to supply customers;
- attenuate water and flows in support of flood management;
- receive wastewater and biosolids safely back into the environment;
- provide a location for our assets and offices, both engineered and nature-based interventions; and
- provide operational and construction resources, such as chemicals, cement, metals and energy.

We impact on natural capital by:

- looking after the condition of the land we own and influence, including habitat health and biodiversity;
- managing our abstractions, final effluent quality, overflows, pollution incidents, and our catchment programmes;
- releasing and storing greenhouse gas (GHG) emissions that contribute to climate change; and
- emitting air pollutants that impact the health of people and nature.

Links to principal risks

- Water service
- Wastewater service
- Health, safety and environmental

Read more about **our principal risks** on pages 64 to 65.

Human capital

Our colleagues' competencies, capabilities and experiences, and their motivations to innovate. Our people are essential in delivering services for customers, and a skilled, engaged and motivated team of colleagues, suppliers and contractors is fundamental to great performance and colleague retention, which helps ensure efficient training and better performance.

How we manage this key resource

We support thousands of jobs in the North West, including graduate and apprenticeship programmes, helping to secure a legacy for the future in our region. We are an accredited Living Wage Foundation employer, providing our colleagues with competitive salaries and benefits, an attractive pension offering, and the opportunity to join healthcare schemes and a share incentive plan. We provide comprehensive training and development opportunities, including digital skills to help with our Systems Thinking approach, and enable remote working where practical.

We promote equity, diversity and inclusion, recruiting from across the communities we serve and supporting our colleagues with equal opportunities. Networks, representing groups of colleagues that may face specific challenges, are overseen by an executive sponsor and support colleagues through their career progression.

Read more about **equity, diversity and inclusion** on pages 54 and 55

We are committed to protecting the health, safety and wellbeing of our people, and have been awarded the workplace wellbeing charter.

We measure colleague engagement through an annual survey, and regularly achieve results higher than UK norms.

We monitor and measure performance through annual reviews. Colleagues at all levels of the company participate in the bonus scheme, with the same bonus performance measures as the executive directors, so everyone benefits from the success of the company.

We depend on human capital to:

- deliver services for customers through the skills, knowledge and experience of our workforce;
- run a responsible business and deliver our services in an efficient and productive way; and
- provide diversity of thought and a range of perspectives.

We impact on human capital by:

- prioritising health, safety and wellbeing and working conditions;
- developing, training and recruiting the workforce, including graduate and apprentice programmes; and
- managing equity, diversity and inclusion with fair opportunities and remuneration.

Links to principal risks

- Resource
- Health, safety and environmental

Key resources

Manufactured capital

Manufactured physical objects available to an organisation for use in the production of goods and/or the provision of services, including buildings, equipment and infrastructure. For example, our network assets and treatment works are essential to delivering our services for customers and protecting public health.

How we manage this key resource

Since privatisation, the significant investment made in our assets has provided substantial benefits to customers, including reduced supply interruptions, reduced sewer flooding incidents, and improved water quality. We expect to continue with a substantial investment programme for the foreseeable future as current environmental legislation is expected to drive significant investment needs.

Long-term planning helps us understand where and when we need to invest in our assets, and we monitor the condition, performance and health of our assets.

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

Our assets and infrastructure projects can affect people who live nearby. We consult with these communities in the planning stage and work hard to minimise any negative impact, such as odours from our wastewater treatment works.

We depend on manufactured capital to:

- deliver safe and reliable services; and
- keep our assets secure.

We impact on manufactured capital by:

- maintaining, protecting and improving assets and infrastructure;
- developing new assets and infrastructure where required;
- managing the effectiveness of our capital delivery programmes; and
- following best practice approaches to be efficient and effective, such as ISO 55001 - Asset Management.

Links to risks

- Water service
- Wastewater service
- Resource
- Security

Financial capital

The pool of funds that is available to an organisation for use in the production of goods or the provision of services, or obtained through financing, such as debt, equity or grants, or generated through operations or investments. As a result of the long-term nature of our assets, and the need to ensure affordability by spreading the cost fairly between the generations of customers that benefit, it is necessary to raise financing to fund investment in building, maintaining and improving our assets, networks and services.

How we manage this key resource

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

We provide regular updates to debt and equity investors and meet with many top investors to establish two-way dialogue about matters of interest to them.

We maintain relationships with a range of banks and retain access to a broad and diverse range of sources of financing in a number of markets, across which we seek the best relative value when issuing new debt. We periodically refresh our medium-term note programme to enable efficient debt issuance under pre-agreed contractual terms, and the board delegates authority to the CFO, allowing us to respond quickly to attractive financing opportunities. This helps us to consistently raise efficient financing. Our sustainable finance framework allows us to raise debt based on our strong ESG credentials.

We aim to avoid a concentration of refinancing in any one year, and fund long term where possible. Our debt portfolio has a very long average life, and we monitor liquidity forecasts with a policy of having resources available to cover the next 15–24 months of projected cash flows to ensure forward funding needs are met. We have clear and transparent hedging policies covering credit, liquidity, interest rate, inflation and currency risk, and these are aligned with the regulatory model.

We depend on financial capital to:

- finance our activities and smooth out cash flows; and
- pay our operating, financing and capital delivery expenses.

We impact on financial capital by:

- being efficient in our operations;
- working with long-term investors and demonstrating good governance for fair and sustainable returns; and
- being a responsible business that acts fairly on tax.

Links to principal risks

- Supply chain and programme delivery
- Finance

Social capital

The institutions and relationships within and between communities, groups of stakeholders and other networks and the ability to share information to enhance individual and collective wellbeing. It is really important that we maintain positive relationships with stakeholders across our region, such as suppliers, regulators and community bodies.

How we manage this key resource

We have contracted for around 80 per cent of our base capital programme for the 2020–25 regulatory period, with arrangements in place for sharing of cost overruns to incentivise efficient delivery against the target price.

Our supplier relationship management process ensures regular discussions between our commercial team and existing suppliers to help identify issues and opportunities for a smooth and productive relationship, and we engage suppliers on sustainable and ethical issues through our United Supply Chain (USC) approach.

We actively engage with all our stakeholders, including our regulators with whom we discuss short-term and longer-term priorities and objectives and respond to consultations so we are influencing where we are able to.

Our stakeholder engagement extends to various environmental interest groups and community bodies, whom we keep informed, collaborate with and, in some instances, form partnerships with.

This engagement helps us develop a matrix of the issues that are most material to stakeholders and to our ability to create value, and our assessment of these issues is a key part of our planning approach.

Read more about **engaging with our stakeholders** on pages 56 to 57

We depend on social capital to:

- maintain and grow trust with all of our stakeholders (e.g. customers, communities, suppliers, investors) to encourage them to act in a way that helps deliver improvements;
- understand the needs of customers and stakeholders to shape how we best deliver for them; and
- collaborate with customers and stakeholders on shared challenges such as leakage, flooding and water efficiency.

We impact on social capital by:

- managing the quality and resilience of our water, wastewater and customer services now and for the future;
- supporting customers who struggle to pay their bill and those in vulnerable circumstances;
- creating spaces for access and recreation; and
- communicating and collaborating with all stakeholders.

Links to principal risks

- Supply chain and programme delivery

Intellectual capital

Organisational, knowledge-based intangible assets such as intellectual property, and systems, procedures and protocols. For example, the knowledge and systems we have across our business are critical to effectively running our treatment works and maintaining our assets to ensure a long-term resilient service. Our understanding of the region and the people who live here, aligned to our systems and assets, provides a key aspect of this knowledge.

How we manage this key resource

We use a variety of methods to drive innovation and find novel ideas and solutions such as idea scouting, using ideas from other water companies across the world and from other industries. We invite companies to bring innovative solutions to us through our Innovation Lab programme, and we encourage innovation at all levels inside the business, including our CEO Challenge programme where our graduates work in groups to find novel ways to tackle challenges that we face.

These initiatives are a source of fantastic new ideas and often lead to the development of products and software that give us a competitive advantage against our peers in the water industry. Occasionally, new ideas are worth protecting with copyrights, trademarks and patents, and we manage this intellectual property portfolio for short and long-term benefit.

Our Systems Thinking approach involves remote monitoring and control, taking a ‘whole system’ view of our network and assets, and proactive and preventative optimisation to spot and resolve issues before they impact customers. This requires a network of systems and processes, and at the higher maturity levels we use artificial intelligence to optimise the way we operate. With sensors in our network sending real-time data to our Integrated Control Centre, we develop an understanding of the signature and can predict patterns that enable us to spot anomalies that signal issues we can then proactively fix.

We depend on intellectual capital to:

- provide the know-how to run our business effectively and efficiently;
- deliver continuous improvement and innovation to be more efficient and effective, e.g. real-time monitoring and analytics;
- give competitive advantage by developing strengths in our processes and systems; and
- protect us from cyber attacks.

We impact on intellectual capital by:

- investing in research, development and innovation;
- monitoring and managing our processes and systems;
- managing our digital capability; and
- collaborating with the supply chain and other partners.

Links to principal risks

- Resource

In this section you will find:

Our purpose

Why we are here

Providing great water for a stronger, greener and healthier North West

Our purpose highlights how environmental, social and governance (ESG) considerations are integral to everything we do.

As shown on pages 18 to 19, each step in our water cycle and every aspect of our activities is aligned with delivering our purpose, and this is what drives us to create value for all of our stakeholders.

Our strategic priorities

How we deliver our purpose

Improve our rivers

We are a sector leader in minimising pollution, and continue to protect bathing waters across the North West. River health in the UK has received a lot of public interest. The industrial legacy and high rainfall in our region means we have a bigger task than many to deliver the significant reduction in storm overflow activations required by the Environment Act 2021. This will form a significant component of our 2025–30 business plan, and we are accelerating investment with good progress already made.

Read our Better Rivers case study on page 90

Provide a safe and great place to work

We invest in our colleagues' training and development, and maintain high levels of health, safety and wellbeing. We want to attract, develop and engage great talent across the organisation, we support and encourage a diverse and inclusive culture, and we want colleagues to be empowered to contribute to making things better. To facilitate this, we are launching new 'Call it out' and 'Tell me' initiatives, which enable everyone to raise topics directly with the CEO and receive a response within 48 hours.

Read about our performance for colleagues on pages 96 to 102

Spend customers' money wisely

We continuously challenge ourselves to improve cost efficiency in a sustainable way, so we can keep customer bills as low as possible in the long term without compromising on service or resilience. We look to minimise whole-life cost and deliver the best value solutions, using Systems Thinking and innovation to find better ways of working, leveraging partnerships and driving value in our supply chain, capitalising on digital and automation opportunities, and removing areas of duplication or waste.

Read about our financial performance on pages 112 to 119

Create a greener future

We are committed to protecting nature and biodiversity, and reducing water consumption. We have six carbon pledges underpinned by ambitious science-based targets and a net zero transition plan. We generate around a quarter of our energy from bioresources and through partners. We are looking at how we can make the best use of our land to deliver clean energy, be that through our pledges to create woodland and restore peatland, or increasing our renewable energy generation capacity.

Read about our net zero transition plan on pages 45 to 47

Deliver great service for all our customers

Delivering great service means continually improving our ways of working, for example, improving water quality, minimising interruptions, leakage and sewer flooding, and supporting customers with affordability and vulnerability. Engagement helps us understand what matters most to customers and we act on their feedback. This can be seen in the way we redesigned our bills based on customer research, and the early investment we are making to improve customer and environmental performance faster.

Read about our performance for customers on pages 96 to 103

Contribute to our communities

We work closely with communities across the North West and we want to ensure we are visible and trusted. We actively engage and make use of partnerships to drive value for communities, such as our participation in the Love Windermere initiative. With much to deliver in the years ahead, we have appointed regional stakeholder managers for each of the North West's five counties to help manage these relationships and ensure we can deliver our planned improvements with minimal disruption.

Read about our performance for communities on pages 104 to 111

Our planning horizons

We plan for long, medium and short-term horizons to deliver our purpose in a sustainable way.

Our approach to planning

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

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

Read more about our materiality matrix on page 29, our risk management on page 60, and our net zero transition plan on page 45

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

Long-term planning looks out 25 years and more. This helps us identify what we need to do to manage risks and opportunities that may arise, building resilience to ensure we can provide our essential services to customers far into the future.

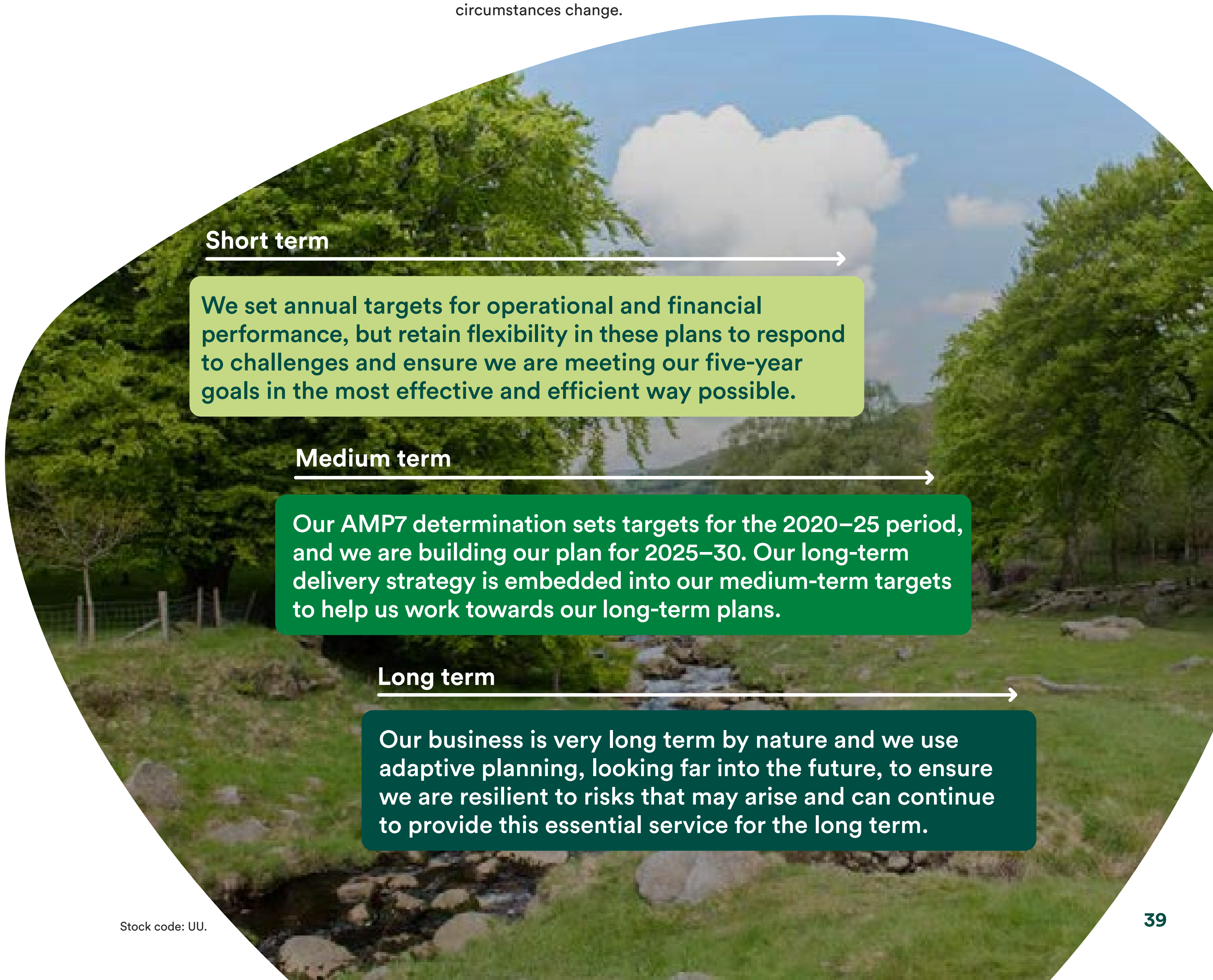
Medium-term planning covers how we will deliver the commitments of our final determination for the current regulatory period (AMP7), as well as our non-regulatory activities, and our plans for the next five-year period (AMP8), so this currently extends out to 2030.

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

Metrics and targets

We set targets across each of these planning horizons, with our shorter-term targets helping us to ensure we are on track to deliver our longer-term ones. The metrics we track include key risk indicators, enabling us to adapt our plans to meet changing conditions, and performance metrics to continuously assess how we are doing against our targets. We use a wide variety of performance metrics, both operational and financial. These help us to measure the value we are creating for all of our stakeholders, and we have selected three operational key performance indicators (KPIs) for E, S and G, as well as monitoring various other performance metrics of interest to these stakeholders.

Read more about our metrics and targets on pages 76 to 83



Short term

We set annual targets for operational and financial performance, but retain flexibility in these plans to respond to challenges and ensure we are meeting our five-year goals in the most effective and efficient way possible.

Medium term

Our AMP7 determination sets targets for the 2020–25 period, and we are building our plan for 2025–30. Our long-term delivery strategy is embedded into our medium-term targets to help us work towards our long-term plans.

Long term

Our business is very long term by nature and we use adaptive planning, looking far into the future, to ensure we are resilient to risks that may arise and can continue to provide this essential service for the long term.

Our planning horizons continued

Our adaptive planning approach ensures we are able to respond to risks and opportunities that may arise in the short term or far into the future.

1 year

Short-term planning

We set annual, measurable targets, but retain flexibility to enable us to respond to challenges that may arise.

Short-term planning helps us work towards our medium and long-term goals and provides us with measurable targets so we can continually monitor and assess our progress.

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

Performance against these annual targets determines the bonus percentage that is awarded to executive directors and colleagues right through the organisation.

To avoid encouraging short-term decision-making and ensure management is focused on the long-term performance of the company, executive directors are also remunerated through a long-term incentive plan (LTP). This assesses three-year performance and includes return on regulated equity (RoRE), a basket of customer measures, and our carbon pledges.

Read more about the annual bonus and LTP in our remuneration report on pages 170 to 203

Executive directors hold regular business review meetings with senior managers across the business to track progress against our annual targets.

It is vital that we retain flexibility within this short-term planning so we can adapt to meet challenges that may arise during each year, and deliver high-quality and resilient services to customers in the most effective and cost-efficient way possible.

This may involve bringing enhancements forward to deliver improvements for customers early, investing further into the business to maintain service, or delaying projects to occur later in the regulatory period to prioritise expenditure and focus our time on dealing with unexpected challenges that arise.

The severe freeze-thaw we experienced this year demonstrates how we adapt our short-term plans to focus efforts on immediate challenges. Read more on page 48 about the actions we took to maintain services during this time, the impact on our activities, and how we are still managing the aftermath of this extreme weather event.

The challenges presented by COVID-19 in 2020 were another example that showed why this flexibility was crucial and how effectively we managed this significant and sudden change.

up to 2030

Medium-term planning

Aligned to the commitments in our AMP7 determination and our plans for AMP8.

The majority of the group's activities sit in our regulated water and wastewater business, so our medium-term planning mostly sets out how we will deliver against the commitments in our final determination from Ofwat for each five-year period, and our plans for the next one.

To ensure we deliver for all stakeholders, including customer preferences and environmental requirements, we align our plans to these priorities in line with key published methodologies.

Our medium-term plans are designed to help us work towards our long-term delivery strategy, build and maintain resilience, and fulfil our purpose.

We engage in extensive research to ensure our plans are robust and balanced, targeting the best overall outcomes for all our stakeholders.

Following scrutiny and challenge from Ofwat, we receive the final determination, which sets the price (in terms of total expenditure recovered through customer bills), service level, and incentive package that we must deliver over the five-year period. This includes an expected return to meet financing costs.

Adaptive planning is important in meeting our medium-term targets in the most effective and efficient way. During the current 2020–25 period we have adapted our total expenditure (totex) in two ways.

First, we accelerated our capital programme, with around £500 million of totex brought forward over the first three years, delivering improvements early and making a strong start to our plans.

Second, we extended our totex by £765 million to deliver customer and environmental improvements, accelerating delivery of the Environment Act 2021 and improving performance against customer outcome delivery incentives (ODIs).

Our strategy helps us create value for our stakeholders by delivering or outperforming the final determination. We publish an annual performance report (APR) in July of each year, which reports our performance in a format that is comparable across the sector. This includes Return on Regulated Equity (RoRE), which comprises the base allowed return and any out/underperformance.

Our APR will be available at unitedutilities.com/corporate/about-us/performance/annual-performance-report

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

up to 2080

Long-term planning

We plan far into the future to ensure we can respond to risks and opportunities that may arise.

To maintain a reliable, high-quality service for customers long into the future, we need to anticipate and plan for things that may impact on our activities. This includes monitoring the age and health of our assets, keeping track of innovations and advancements in technology, and looking at current and predictive data from various sources to track key risk indicators (e.g. economic forecasts, expectations for population growth, climate and weather predictions, legal and regulatory consultations and changes).

We review this information as part of our long-term planning and risk management processes, through which we assess and manage opportunities and risks such as climate change, population growth, a more open, competitive market, water trading, more stringent environmental regulations, developments in technology, and combining affordable bills with a modern, responsive service.

Our website has a dedicated section where we examine key long-term challenges and how we will focus our resources and talents to meet them.

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

You can find our long-term plans, such as:

- Water Resources Management Plan – setting out the investment needed to ensure we have sufficient water to continue supplying customers, taking into account the potential impacts of climate change, covering a 25-year period and considering consumption and climate forecasts out to 2080;
- Drought plan – setting out the actions we will take to manage drought risk, updated every five years; and
- Adaptation report – setting out the current and future predicted impacts of climate change on the business and our proposals for adapting to a changing climate.

Our long-term delivery strategy out to 2050 is embedded into our plans for AMP8, and we are developing a Drainage and Wastewater Management Plan – examining the risks around flooding, pollution, storm overflows, and wastewater treatment over a 25-year period – that will be published in 2024.

We use whole-life cost modelling and maintain a robust financing structure to ensure we can invest efficiently to meet our long-term plans. Our training and development, graduate and apprenticeship programmes, and work with schools to encourage STEM careers, all helps to ensure we retain the skills we need in the North West to continue delivering these plans.

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

TCFD

Summary

- Twin track approach of adaptation and mitigation to address climate change and manage both physical and transitional risks in a sustainable and resilient way.
- Further developed our strengths in long-term and adaptive planning to manage uncertainties and ensure a low regrets approach.
- Built relationships with key suppliers to reduce environmental impact by sharing best practice and collaborating on how to reduce GHGs and improve resilience.
- Assessed the carbon impact of our DWMP, WRMP and PR24 plan to minimise impact while enhancing environmental and social value and resilience.

Most material climate-related risks – risk score[1] of 9+ in our 2021 adaptation report

We already experience the impacts of climate change with increasingly frequent or more extreme cold snaps and heatwaves and changes to rainfall.

TCFD risk type	Climate trend	Leading to	Horizon ST	Horizon MT	Horizon LT	Resulting in...
Physical – acute	Cold snaps	Reduced effectiveness of biological processes in wastewater treatment	Low	Medium	Medium	Pollution events
		Leaks and thus increased volumes of calls	Low	Low	Low	Pressure on our emergency response
	Extreme events	Increasing frequency and duration of loss of power within a treatment process	Low	Medium	Medium	Service disruption
	Heatwaves	Causing work environments to become intolerable	Low	Medium	Medium	Risk to health, safety and wellbeing
		Resulting in increased reservoir misuse	Low	Low	Low	Risk to health, safety and wellbeing
Physical – chronic	Increased rainfall	Sewer capacity exceeded	High	High	High	Sewer flooding, pollution incidents, customer impact
		Flooded assets	High	High	High	Service disruption and asset damage
		Restrictions on ability to recycle biosolids to land	High	High	High	Adverse effect on supply and demand of biosolids to agriculture
		More storm overflow activations	High	High	High	Pollution and perception of pollution of rivers and bathing waters
		Runoff polluting water sources	Medium	Medium	High	Water quality deterioration
		Increased soil movement causing pipe systems to move leading to fractures	Medium	Medium	High	Service disruption and asset damage
		More runoff from agricultural land	Low	Medium	High	Raised nutrient loads in water sources
		Increased use of rising mains	Low	Medium	High	Supply interruptions and energy use
		Decreasing raw water quality	Low	Medium	High	Impact to treatment and costs
		Floods, accidents and landslips	Low	Medium	Medium	Disruption to transport and supply lines
	Hotter, drier summers	More severe and frequent moorland/forestry fires	Medium	High	High	Water demand and quality stresses, risk to catchment health
		Promotion of cyanobacteria and actinomycetes growth	Low	Medium	Medium	Taste and odour compound formation
		More NW tourism and access of UU land	Low	Medium	Medium	Increased risk of damage to land and catchments
	Lower average summer rainfall	Reducing water resources	Medium	High	High	Supply interruptions
		Shock load from first flush when it rains	Low	Medium	High	Pollution
		Blockages in the sewage system	Low	Medium	High	Sewer flooding and pollution
		Political pressure regarding water use priorities	Low	Medium	High	Supply interruptions and impact to reputation
	Rising sea levels	Coastal flooding	Low	Medium	Medium	Asset failures
Transitional	Moving to a net zero economy	Decarbonisation of the UK electricity grid	High	Medium	Low	More intermittent power generation
		The need to adopt new technologies driven by a change in legislation and standard practice	Medium	Medium	Medium	Change in operational processes and capabilities
		Legislation, taxation, and decarbonisation targets	Medium	Medium	Medium	Higher energy costs and greater regulatory duties
		Changes in social expectations	Medium	Medium	High	Demand for further progress
		Water use change including increased abstraction by other catchment users	Medium	Medium	Medium	Pressure on water resources

(1) Risk score is the product of score (between 1 and 5) for likelihood and consequence.

Key: Low <8 Medium 8 to 12 High 12+

Climate-related risks and opportunities impacts

Climate risks and opportunities are assessed using the same planning horizons, materiality and risk assessment as other matters. As our assets typically have long, even very long, lifespans, our planning horizons look longer into the future, in some cases as far as 2080.

Our services being intrinsically linked to the natural environment, it is not surprising that many of our most material climate risks are physical risks. The weather directly and indirectly constrains our ability to deliver our services which is why climate change will exacerbate the impact of existing challenges such as sewer flooding, asset flooding and asset deterioration.

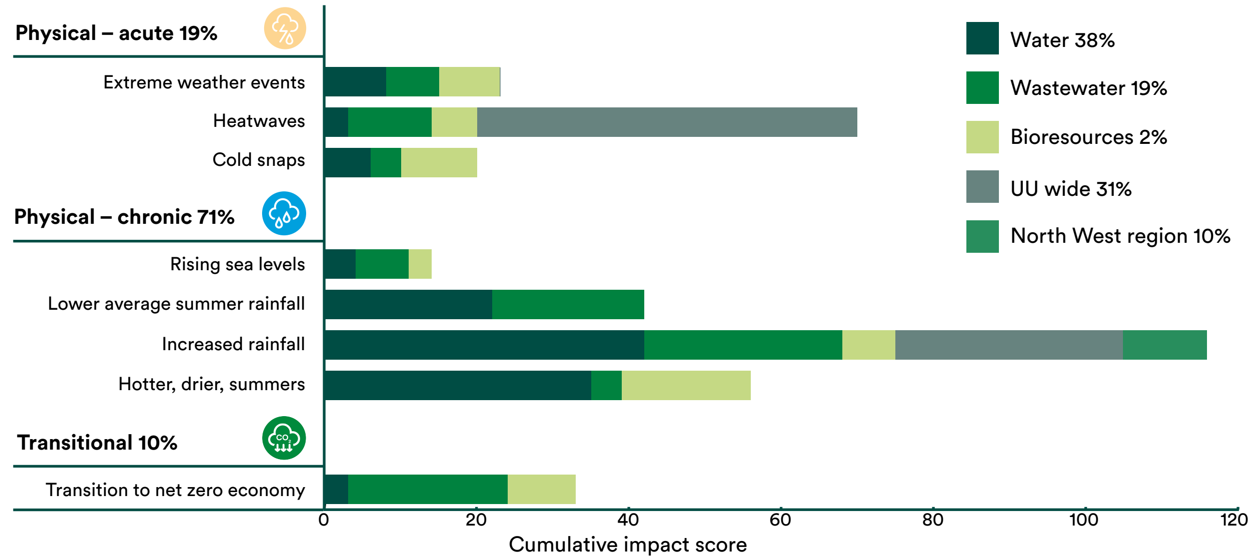
The North West region has 28 per cent more rainfall than the average for England and Wales. This, together with our significantly higher proportion of combined sewers, puts more pressure on our sewerage and treatment infrastructure, and in turn creates greater risk from sewer flooding and/or activations of storm overflows.

We have quantified the impacts of the physical climate risks (see 2021 Adaptation progress report) using the highly respected and relevant Met Office UK Climate Projections 2018 (UKCP18). For our assessment we chose the Met Office climate projections for the representative concentration pathway, RCP 6.0, which has an emissions peak occurring in 2080 and an expected 3.0–3.5°C increase in global mean temperatures from pre-industrial levels. We chose this as it is widely recognised to be the most likely pathway that supports effective planning.

To assess the magnitude of the transitional risks we have adopted a more qualitative approach though for risk assessment and mitigation planning we have used the carbon values (£ per tCO_2e) for use in policy appraisal, provided by the UK Government (BEIS).

Climate-related risks by business area and region and TCFD risk category – from 2021 adaptation report

The chart below shows the cumulative impact/consequence scores of the assessment of climate-related risks in the 2021 adaptation progress report. These risks are also those that have been considered in the preparation of the financial statements, see page 241. Percentages are of the total cumulative score for the business area and region or TCFD risk category.



Addressing the impact of climate change in our planning

Predicting the effects of climate change is multifaceted and complex. There is considerable uncertainty about how our processes, people and infrastructure will respond to the challenges of both climate and demographic changes. We address the challenge of uncertainty by using adaptive planning to shape our plans for the long term (25+ years) while remembering our short-term needs and financial and regulatory constraints. An adaptive approach allows us to prepare for the future without knowing the exact scale and impact that climate change poses on our services. This means we can be agile as climate science and technology advance, as legislation develops and our customer and stakeholder expectations evolve.

Our public Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) address this multidimensional challenge by using detailed and extensive models to test how resilient our services would be against a wide range of possible future demands from population growth and movement, economic trends and patterns of water use. Understanding these potential impacts allows us to adapt our plans to improve performance and resilience across key topic areas such as water supply, leakage, sewer flooding and pollution.

Our ability to pre-empt compound physical impacts to our system, and have various recovery tactics, is increasingly vital in effective climate change adaptation. We are addressing how to plan for when multiple different extreme weather events occur in a short time frame. An example of such a cascade effect is the dry and hot summer of 2022 being followed by a winter with freeze-thaw challenges.

To address compound issues, we stress test our WRMP by building weather scenarios that combine together pairs of worst examples of weather that have happened in the past, for instance, a dry winter like 1984 being followed by a 1995/96 style summer. We then model how our current assets and systems would cope.

As well as combining impacts in our modelling, we are also attempting to deliver compound benefits in our controls by designing interventions that have multiple benefits. For instance, sustainable drainage systems (SuDS) to slow down or divert rainwater runoff both reduce the risk of sewer flooding and optimise wastewater treatment capacity and also provide an opportunity to deliver wider social value in the community and local environment.

TCFD Climate strategy continued

Using scenario analysis to test resilience

In developing our long-term strategic plans, and seeking customer feedback on those plans, we have used potential scenarios of the future encompassing wide ranges of environmental, regulatory, technological and societal possibilities. To simplify the interaction of multiple factors while retaining an expansive scale of uncertainty about the future, the three company-wide alternative scenarios for 2050 have different values or descriptions for the most relevant factors such as the water industry structure, the North West economy, water value to customers and climate change. These scenarios are named 'green guardianship', 'centralised control' and 'climate chaos'.

The scenarios recognise climate change as one of the most critical factors and use RCPs 2.6, 4.5 and 8.5 (GHG concentration pathways adopted by the Intergovernmental Panel for Climate Change) to describe how well climate change has been mitigated by society in each case. This in turn gives the relative climate risks in each scenario. In the extreme climate scenario of 'climate chaos' the physical risks are substantial and provide a worst case from which to base our adaptation planning. At the other extreme, 'green guardianship', the challenges of providing water and wastewater services in the North West are determined primarily by transitional risks. For instance, the risk from an electricity supply from a UK grid that is based on low-carbon but intermittent power generation and therefore is more vulnerable to power outages.

These imagined future scenarios have brought challenges and ambitions into sharp focus and encouraged reconsideration of the relative priorities in our business plans. For example, our latest plans now include even greater focus on further reducing water use and preventing storm overflow activations and flooding.

Climate and societal scenarios

Scenario variables	Green guardianship	Centralised control	Climate chaos
Climate change	Transition risks dominent RCP 2.6 1.5 to 2.0°C	RCP 4.6–6.0 2.5 to 3.5°C	Physical risks dominant RCP 8.5 5°C
Future of work	Continued urbanisation	Static urbanisation	Reverse urbanisation
Value of water and environment	High societal, and economic value	Medium societal and economic value	Severe degradation and biodiversity loss
Industry structure	Collaborative	Directed	Defensive
Digitisation	Moderately digitised	Highly digitised	Highly digitised
North West economy	Prosperous economy	Poor conditions	Mixed conditions

Transitional
Physical – chronic
Physical – acute

Net zero transition plan | Potential futures | Adaptation plan

Future focus

- Publish more details behind our net zero transition plan.
- Continue to improve our assessment of climate-related risks and opportunities.
- Embed low-carbon and climate-adjustable approaches in our long-term delivery strategies and PR24 business plans.

Read our adaptation progress report on our website at unitedutilities.com/corporate/responsibility/environment/climate-change/

Read our net zero transition plan on pages 45 to 47

TCFD Our net zero transition plan

Our net zero transition plan

Our transition plan to contribute to, and prepare for, a rapid global transition towards a low-emission economy is based on our established climate change mitigation strategy. This has four pillars: vision and visibility; ambition and commitment; demonstrating action; and beyond here and now. Between them, these pillars define our principles, priorities and approach.

Vision and visibility

Demonstrating integrity and leadership in carbon reporting and disclosure.

Vision and visibility are the foundations of our climate change mitigation strategy and thus our net zero transition plan. We have a strong track record of sustainability reporting, having disclosed our GHG emissions for nearly 20 years. We are committed to reporting in the most open and transparent way possible, aiming to be recognised as among the best in the UK. We have responded to the CDP climate change questionnaire since 2010 and use this as our benchmark of leadership. We were proud that our 2022 response was rated as A-, putting us in the leadership category.

We publish our GHG emissions and underlying energy use in our annual report as required under the Companies Act 2006 and follow the 2019 UK Government Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance. Our reporting is supported by robust governance and accountability mechanisms. Since 2007, our greenhouse gas inventory has undergone independent, third-party verification by Achilles Group, confirming our reporting is compliant with the international carbon reporting standard (ISO 14064) and certified as compliant with the CarbonReduce programme.

We are dedicated to understanding how every aspect of our operations contributes to our emissions. Our vision is to ensure we consider the climate in all our operational and strategic decision-making and to influence strategy and behaviours by including in remuneration schemes and carbon pricing in our six capital value framework.

Ambition and commitment

Playing our part to mitigate climate change and lower our greenhouse gas emissions to help make the North West a better place to live now and in the future.

An important element of our approach is to demonstrate our ambition and encourage others to contribute by making public commitments. In 2020 we made six carbon pledges as part of our commitment to tackling climate change and we are making good progress. See page 92 for more details.

Central to our pledges was to set science-based targets for all emission scopes. United Utilities is proud to be the first UK water company to have targets approved by the Science Based Targets initiative (SBTi), a collaboration that defines and promotes global best practice in science-based target setting. SBTi assessed and verified our four science-based targets in July 2021 and commended our ambitious 1.5°C aligned scope 1 and 2 target.

Our four targets are:

SBT1 – 42 per cent reduction of scope 1 and 2 emissions by 2030 from a 2020 base year;

SBT2 – increase annual sourcing of renewable electricity to 100 per cent;

SBT3 – 66 per cent of suppliers by emissions within scope 3 capital goods will have science-based targets by 2025; and

SBT4 – 25 per cent reduction of scope 3 emissions (other categories) by 2030 from a 2020 base year.

These near-term targets are intended to deliver an emissions reduction pathway consistent with the 1.5° ambition of the Paris Agreement. The SBTi Net Zero Standard was launched late 2021 and we will validate our long-term net zero ambition to this standard when we revise and revalidate our near-term targets in advance of 2025.

Demonstrating action

Reducing our environmental impacts through delivery of transformation strategies and culture change.

Our action plan to achieve the long-term ambition of 'net zero by 2050' (in line with the UK Government) is set out on the next page with the hierarchy below. We are already working on, and delivering on, actions in all themes to:

- **reduce** through the efficient use of resources;
- **replace** processes and resources with more sustainable alternatives;
- **remove** GHGs from the atmosphere;
- **collaborate** to tackle emissions in the supply chain; and
- **innovate** to address current technological or market gaps.

Our priority in the medium term will be to reduce our emissions through these actions before we purchase any credits to offset the residual emissions to net zero.

TCFD

Net zero transition plan

GHG emissions scopes

Our net zero transition plan addresses all three emissions scopes.

Scope 1 – emissions from activities we own or control

Wastewater and sludge processes cause approximately 70 per cent of our scope 1 emissions as the gases released, nitrous oxide (N_2O) and methane (CH_4), have much greater global warming potentials than carbon dioxide (CO_2). Our process emissions are currently estimated as a direct function of the population whose wastewater we treat. This means that, even if we achieve a 100 per cent green fleet and eradicate all fossil fuel use, along with the global water industry we still have the gigantic challenge of process emissions to tackle.

Scope 2 – emissions from electricity and heat purchased

Our scope 2 emissions have reduced since we began to measure them in 2005/06 from 360 $ktCO_2e$ to 261 $ktCO_2e$ (location-based) and 0 $ktCO_2e$ (market-based). This is a combination of the ongoing decarbonisation of the UK grid, maintaining our energy requirements in the face of substantial growth and policy to buy REGO backed renewable electricity supplies.

We have ambitions to substantially increase our self generation and energy resilience by using our land for development of renewables and other clean technologies.

Scope 3 – emissions from our value chain

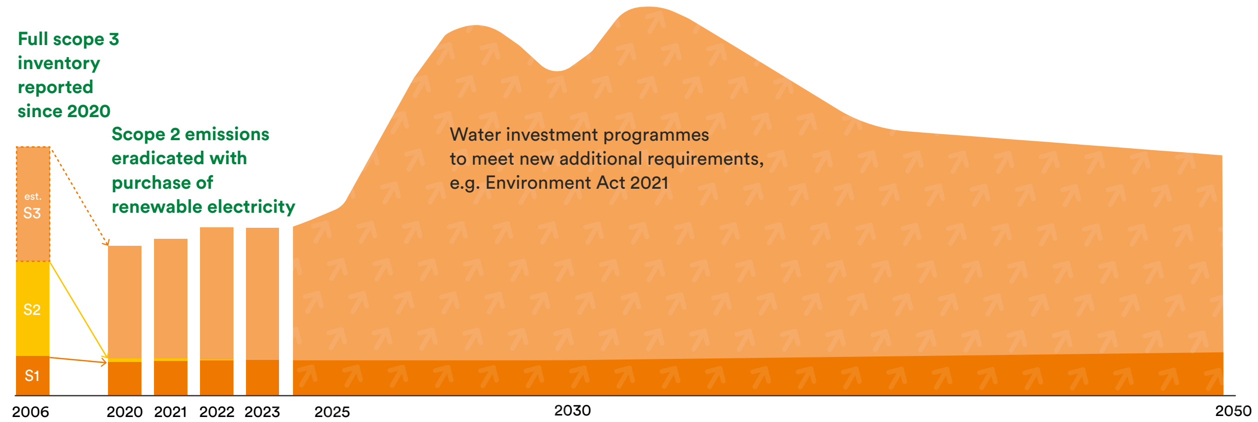
Scope 3 emissions are proportional to our business activities. This means if our infrastructure development activity increases, for instance as a result of a prescribed environmental programme as is expected for AMPs 8 and 9, then our emissions will also substantially increase. This increase could be mitigated by the use of nature-based solutions and low-carbon material replacements, but it is by no means certain these technologies and processes will be market ready in time.

Action plan

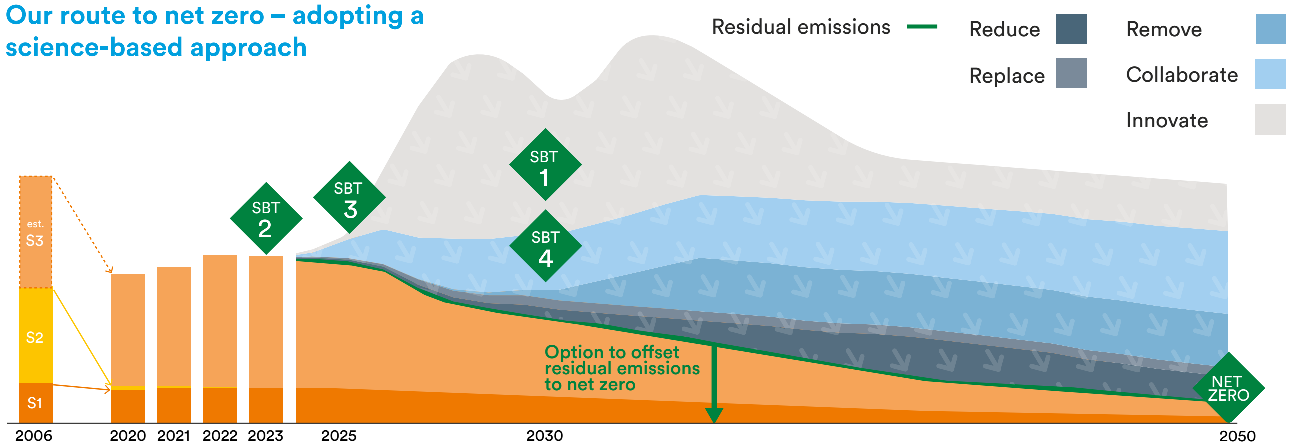
Action plan	Short term including recent progress	Medium term	Long term
Reduce through the efficient use of resources	• Colleague campaign 'Use Less, Save More' • Achieved ambitious targets for percentage of waste to beneficial reuse	• Optimise wastewater processes for GHG • Careful delivery of environment improvement programmes	• Continual search for efficiency opportunities
Replace processes and resources with more sustainable alternatives	• **Renewable electricity sourcing** • Substantial renewable energy generation capacity and capability • 60%+ sludge processing by low GHG advanced digestion	• Grow further renewables capabilities and capacity • Bioresources planning and investment to increase sludge processing capacity • **Electric vehicles rollout and trials for HGVs**	• Replace fossil fuels with alternatives e.g. hydrogen • Nutrient recovery initiatives • Continual stretch for sustainability informed by latest innovations
Remove GHGs from the atmosphere	• Woodland creation – planning and first planting schemes • Peatland restoration – schemes started	• **550ha woodland creation** • **1000ha peatland restoration**	• Growing benefits from created woodlands • Carbon capture, use and storage
Collaborate to tackle emissions in the supply chain	• Comprehensive scope 3 reporting • **Encourage SBTs for capital delivery partners**	• Inform national approach to water environmental improvements • Enriched sustainability criteria for suppliers • Quantify emissions using product/activity data	• Collaborate to decarbonise our infrastructure programmes and wider supply chain
Innovate to address current technological or market gaps	• Carbon categories in United Utilities Innovation Labs • CEO challenge improvement projects on carbon	• Low-carbon capital delivery options e.g. nature-based solutions and low-carbon concrete • Process emissions monitoring • Nutrient recovery research	• Transformation in water and wastewater processing e.g. nature-based solutions • Opportunities for circular economy • Eradicate use of remaining fossil fuels

Actions in green text directly link to our six carbon pledges

Our emissions challenge – large growth pressures from environmental obligations



Our route to net zero – adopting a science-based approach



Our plan to net zero is a science-based approach focused on reducing emissions as the first priority whilst growing our programmes that store carbon, such as peatland restoration and woodland creation, and working with our supply chain to share and develop sustainable development practice. We may purchase credits in the medium to long term to offset residual emissions and achieve net zero.

We will go beyond emissions reductions and include sustainable use of natural resources and increased application of the waste hierarchy and the principles of a circular economy in our processes and physical infrastructure.

We will also enable, encourage and reward action to protect and enhance the natural environment and promote the value of ecosystem services across our business and supply chain.

Beyond here and now

Innovating across our processes, technology and culture

We are not only concerned with things we can do now to reduce our reportable emissions. Our strategy pillar of 'beyond here and now' allows us to reflect on the challenge to influence emissions regardless of whether those emissions are part of our inventory. To deliver our net zero transition plan we will be innovative, challenge standards and drive climate change mitigation by understanding and joining in relevant research to develop new technologies and practices. For instance, we are investigating what operational interventions we can make that will reduce process emissions.

We have recently launched our fifth Innovation Lab, a 12-week programme that provides successful applicants with the opportunity to test their solutions to our business challenges in a live environment. The programme is designed to 'look for ideas where others aren't looking' – in other sectors, other countries and with suppliers that are often small, start-up businesses, just starting on their idea development or business growth journey.

We will continue to explore opportunities to innovate across processes, technology, standards and culture and we will lead by example and deliver outcomes in partnership whilst we inform and influence future developments affecting the environment.

Read more about innovation at United Utilities, including how we are using innovative solutions to tackle the sustainability challenges we face, at unitedutilities.com/corporate/about-us/innovation

> "Key lessons learned from previous incidents meant we entered the 2022 freeze-thaw with improved capabilities as a result."

TCFD

Climate case study

Resilience in the face of an already changing climate

With the trend of more extreme weather events set to continue, we must plan, adapt and prepare, to strengthen our operational resilience.

In December 2022 we experienced a severe cold snap, when air temperatures fell below freezing and remained at or below freezing for ten days, reaching a low of -12°C on 15 December, before rising rapidly to 14°C by 19 December. This was a more sustained freeze and more rapid thaw than other recent freeze-thaw events in 2009, 2010 or 2018, and tested our preparedness, response and service recovery.

Freeze-thaw incidents present several challenges which can threaten to disrupt the service we provide to customers, such as frozen pipework on our mains and in customer properties, increased leakage following the thaw and subsequent increases in water demand.

We use Met Office data to assess the risks of weather-related events occurring and to act as an early warning system to trigger preparations for such an event. This approach identified, on 5 December, the risk of a weather-related event occurring and led to detailed preparatory work, including:

- encouraging customers to prepare their homes, with our 'Prepare, Insulate, Protect, Easy' awareness campaign;
- undertaking winter checks on targeted key assets on our system where we expected the impact to be greatest; and
- establishing a key task team, using our incident management procedure, to provide central co-ordination during events.

The immediate impact of the freeze-thaw was significant. A total of 22,464 customers were off supply for more than 12 hours, with the largest proportion of them in the Lancaster and Morecambe area. We very much regret the short-term service interruption some customers experienced, but because of our proactive management of the situation we were able to mitigate the impact to some extent. For example, ahead of and during the loss of supply we were able to provide clear information to local stakeholders, ensure that there were adequate bottled water supplies in the area and take steps to protect vulnerable customers through our Priority Services offering.

Within 48 hours of the thaw commencing, demand for water rose to 20 per cent above normal December levels and reached a peak of 2,200 megalitres per day, significantly higher than the peak following the 2018 'Beast from the East'. This was largely due to water being lost through leakage, both from elevated leakage on our own network and significant bursts on customer pipework and plumbing. Our teams and partners worked around the clock to fix damaged pipes, and we deployed our water tankers to target sensitive non-household customers such as schools, hospitals and prisons.

Management of the incident continued over the Christmas period to ensure that issues were fully resolved until the incident was formally closed on 3 January 2023. Overall, we consider that key lessons learned from previous incidents meant we entered the 2022 freeze-thaw with improved capabilities as a result.

Read more about **the financial impacts of the incident** on pages 99 and 112

TNFD

How nature influences our approach

Protecting and enhancing the natural environment is key to the 'greener' aspect of our purpose. Maintaining compliance and meeting regulatory requirements helps us to maintain the environment, and we enhance it by driving performance improvements, adopting best asset management practices, and investing in nature-based and other environmental solutions. Our environmental policy is underpinned by a framework of strategies and long-term plans in response to nature-related risks and opportunities. Some of these are statutory requirements, like our Water Resources Management Plan, and are reviewed every five years through the price review process.

How we consider nature-related risks, opportunities, dependencies and impacts within our business strategy and planning

Our long-term planning activity considers the uncertainty associated with complex issues such as climate change, population growth, technology and abstraction reduction needs.

Planning for the long term allows us to deliver further environmental and social value. For example, prioritising sustainable drainage and monitoring impacts before investing in more traditional assets, or carrying out modelling and investigations to ensure solutions are best value. This gives us confidence that our investment plans are highly efficient.

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

An example of how we adapt to nature-related risks

Much of the land that we own is designated as Sites of Special Scientific Interest (SSSI), which indicates the importance of the habitat for biodiversity. 94 per cent of SSSIs on our land now meet favourable or unfavourable recovering condition status, in part because we pioneered the use of nature-based solutions to address raw water quality when we started our SCaMP programme in 2005. We recognise our role as a steward of our land and make decisions based on the benefits and impacts our operations have on the natural environment.

Resilience of our strategy

Adaptive planning allows us to test a range of future scenarios to account for uncertainty and sets out how we might adapt programmes in the future to meet long-term ambitions under different circumstances. Through scenario testing, we have been able to prioritise low regrets activities in the short term, preparing ourselves for future needs without investing unnecessarily or prematurely but taking action where it is clearly necessary and good value.

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

Progress this year

- Launched the public consultation on our draft Water Resources Management Plan

Future focus

- Finalise our business plan for 2025–30 with details on how this will improve the natural environment

OTHER

Risks and opportunities of material interest that influence our approach

Cyber security

Our cyber security strategy is largely focused on the security requirements within the Cyber Assessment Framework created by the National Cyber Security Centre (NCSC). This outlines 39 security controls that are required to achieve an industry standard of compliance. These are driven from an EU-defined maturity scale of best practice that is reflected across all European operators of essential services. We have had a strong, dedicated programme of work in place for four years aimed at meeting and maintaining compliance, and have met regular expectations at all times.

Our longer-term strategy and investment plan aims to bolster our broader security posture by focusing significant effort on people, process and technology.

We maintain a good relationship with the NCSC through our dedicated contacts and ensure we have up-to-date visibility of developing and long-term threats at all times, which helps shape our approach to security.

Financial risk management

We have robust financial risk management policies, targets and thresholds for liquidity risk, credit risk, market risk (inflation, interest rate, electricity price and currency) and capital risk. The strategies and limits set out within these policies are designed to avoid excessive volatility and risk, align with the regulatory model in which we operate, maintain strong credit ratings and deliver efficient financing. Read more on pages 265 and 272.

Affordability and vulnerability

Our approach is based on delivering industry-leading affordability and vulnerability support to customers with a wide range of affordability schemes and over 290,000 customers signed up to Priority Services. We use a variety of methods to help customers access the best schemes for them, including our door-to-door affordability visits. We pioneer cross-sector collaborative approaches through our affordability summits and the Hardship Hub platform we developed to help debt advisers access all the help that is available across multiple sectors in one place.

Health, safety and wellbeing

Our aim is that no one will be harmed while working for us or on our behalf, and we actively work to support and improve the wellbeing of our colleagues, for example through our Home Safe and Well programme.

Responsible supply chain

Our United Supply Chain (USC) strategy encourages collaborative and responsible ways of working with our supply chain. Through regular engagement and positive collaboration, we will mitigate risk, improve assurance and create value.

Equity, diversity and inclusion

Our equity, diversity and inclusion plan sets out our strategy and targets, focused on inclusive leadership, encouraging openness, improving our policies, raising awareness, and increasing the use of support networks. Read more on pages 54 to 55.

Our culture and core values

Culture

Our culture drives the interactions we have with our stakeholders, and our commitment to responsible business and sustainability is reflected in the way we measure and report the value we create as a business. Metrics are monitored and targets set for the greener, stronger and healthier ambitions within our purpose, closely aligned to ESG.

Read more about **the value we create** on pages 76 to 79 and **our performance** on pages 84 to 111

When assessing culture, we look at four categories – our core values, our purpose, our strategic priorities, and our people. We monitor a number of key metrics relating to our people, such as engagement, health and wellbeing, diversity, and development.

Read more about **our culture and how the board monitors this throughout the year** on page 135

Our culture is underpinned by three core values, which cascade down the business from the board to every one of our colleagues, guiding how we expect our people to behave in a way that drives a high performance and innovative culture.

Core values

Our core values demonstrate the way we work, and we want to ensure these are clear and easy for all our colleagues to apply to every situation. We have redefined our core values to reflect the things we believe are most important to help us deliver our purpose of providing great water for a stronger, greener and healthier North West.

Do the right thing

First and foremost, as a responsible business, we want our people to always focus on doing the right thing.

This means always putting safety first, delivering for the benefit of our stakeholders, championing fairness, acting with courage and speaking up if they come across anything that doesn't feel right.

This is vital for building and maintaining trust with the public and our stakeholders, and for delivering our purpose: doing the right thing for the natural environment helps us to create a greener North West; doing the right thing for customers, communities, colleagues and suppliers helps us to build a stronger and healthier North West.

Make it happen

We are focused on supporting each other and working as a team to make things happen, taking accountability and putting progress over perfection. We want to celebrate successes, for individuals and for the company, and learn when we don't get things right first time.

This can already be seen across the business, for example:

- Enabling and fostering new ways of working through our Innovation Lab process.
- Being able to act quickly and capitalise on pockets of efficient financing opportunity.
- Our decisions to accelerate investment where we can deliver improvements for customers and the environment faster.

Be better

Ultimately, everything we do is about improving things and creating a better tomorrow for everyone. We want to be better as a company, and this means encouraging our colleagues to live this value as well.

We want our people to be curious, ambitious, and solution-focused, seeking out new and innovative ways to deliver our services more efficiently and effectively.

We want to ensure we are learning from the best people that are available to us, which is why we embrace equity, diversity and inclusion, collaboration and partnership opportunities, innovation and best practice ideas from other companies, other industries, and the wider world.

Remuneration linked to sustainability performance

Part of being a responsible business and delivering our purpose involves making sure our executive, and colleagues, are remunerated in line with our performance for a number of stakeholders, measuring against sustainability metrics rather than purely financial performance.

Bonus measures drive remuneration for all colleagues, and the executive are also remunerated against longer-term performance targets through the Long Term Plan (LTP).

Bonus and LTP remuneration are both linked to service and delivery for customers and the environment, as well as financial targets. This includes customer satisfaction, customer outcome delivery incentives (ODIs), carbon measures, and effective and efficient delivery of our capital programme.

Read more about **our bonus and LTP** in the remuneration report on pages 170 to 203

We are a purpose-led organisation and our strategy, which is set and governed by the board and its committees, helps us deliver our purpose and create sustainable value for all of our stakeholders.

Read more in our **corporate governance report** on pages 122 to 207, including individual reports of board committees

Governance structure

Our governance structure is set out in the diagram below and more information can be found on page 130, including the roles of each committee in ensuring progress against our six strategic priorities.

The board retains overall responsibility, but delegates certain roles and responsibilities to its principal board committees, allowing them to probe deeply and develop a more detailed understanding. The main responsibilities of board committees can be found in the corporate governance report on pages 126 to 207, and these pages include our reporting against the UK Corporate Governance Code. We operate our business in line with the management standards to which we maintain certification, including quality (ISO 9001), environment (ISO 14001), asset management (ISO 55001), health and safety (ISO 45001), and customer vulnerability services (ISO 22458).

The board committees report back to the board on what was discussed at their meetings, decisions taken, and, where appropriate, make recommendations on matters requiring board approval.

The executive team, comprised of senior managers that report directly into the Chief Executive, is responsible for implementing our strategy and for the day-to-day running of the business and other operational matters. It holds two scheduled meetings each month, one focusing on day-to-day performance and the other focusing on matters of a strategic nature, along with weekly informal 'scrums'.

Through the principal management committees, senior managers discuss the needs of the business, raise issues, identify and delegate appropriate actions, monitor progress of key performance measures, and ensure any lessons learnt are implemented. The Chief Executive provides a report, covering financial and operational performance, to the board at every scheduled meeting.

There are then further layers of focus at management and business unit level, all of which feeds up through the committees and, ultimately, to the board through this structure. For example, pages 52 and 60 describes how these layers operate in relation to risk management.

Governance structure of the board and its committees and the principal management committees

Group board
Chair – Sir David Higgins

Code principal board committees
Audit committee
Remuneration committee
Nomination committee

Other board committees
ESG committee
Treasury committee
Compliance committee
Announcements committee

Chief Executive Officer – Louise Beardmore

Principal management committees
Group audit and risk board
Sustainable finance committee
Security steering group
Executive team
Political and regulatory group
Climate change mitigation steering group
Capital investment committee
Future plan strategy board

Key
inform and implement
oversight and challenge

Governance

Governance and reporting process for risk management

The board ensures its oversight of risk remains effective, and in compliance with the UK Corporate Governance Code, through a number of established reporting routes. The board receives a comprehensive update on our risk profile every six months, including the nature and extent of risk exposure of the most significant event-based risks, relative to the inherent principal risks and new and emerging risks. In addition, specific risk topics are reported to the board to support decision-making, enabling it to:

- decide on an acceptable level of risk, relative to risk appetite and tolerance, to deliver on the group's strategy;
- ensure appropriate controls and mitigation are in place, and test the appropriateness of plans;
- report externally on the long-term viability of the company in an informed manner; and
- monitor and review the effectiveness of risk management procedures and internal control systems.

Risk-specific governance and steering groups manage individual risks. The operational risk and resilience board provides oversight of asset and operational process, risk and resilience capability, contributes to the business risk assessment process and escalates risks and issues to the group audit and risk board (GARB). The executive-led GARB focuses on: the adequacy, effectiveness and performance of governance processes; risk management and internal control; monitoring compliance and assurance activities; identification of emerging themes and trends; and resilience across the group. Supported by company secretariat and the corporate audit teams, the audit committee reviews the effectiveness of risk management and internal controls before these are agreed by the board.

TCFD Governance around climate-related risks and opportunities

Summary

- The board and its committees have oversight and scrutiny of climate change matters, including tracking delivery of our carbon pledges, science-based targets, and review of the climate-related risks.
- Climate-related governance is fully integrated within board and management committee responsibilities, supported by our director-led climate change mitigation steering group and cross business working groups.
- Carbon measures are included within the executive remuneration framework and are key components of the environmental performance metrics.
- Public disclosures are complemented through conversations with investors and participation in climate-related indices and assessments. Leadership ratings in both climate change (A-) and supplier engagement (A) for CDP 2022.

Board oversight of climate-related risks and opportunities

The climate and natural environment are critical to our purpose to provide great water, therefore climate matters are monitored closely by our board and the principle committees as a core part of their duties and agenda. The role of the board of directors is to set, review and guide the strategy of the group ensuring the long-term success of United Utilities for customers, investors and wider stakeholders. Climate-related issues play a significant role in determining what is sustainable and responsible for the environment and customers.

The board provides oversight of climate-related matters in the business through our business model, where we:

- consult and plan for short, medium and long-term horizon;
- deliver the outcomes set out in our regulatory contract;
- create long-term value for a range of stakeholders; and
- review and measure our progress.

Our CEO, Louise Beardmore, has responsibility to manage the group's business and to implement the strategy and policies approved by the board and has accountability to the board for climate matters. Louise, as new CEO, is an active and vocal champion with respect to environmental topics and initiatives and she passionately promotes the need for both pace and scale of action to adapt and mitigate climate change.

This year, climate change matters have been discussed by the audit committee in its review of carbon commitments risk and the introduction of the enhanced audit and assurance framework. The remuneration committee covered climate through endorsing continuing the link between long-term incentive outcomes and the delivery of carbon pledges.

Considerations in respect of the impact of climate change risk on the measurement basis of the assets and liabilities of the group are included within the notes to the financial statements (Accounting Policy note, page 241).

Management role

The CEO has ultimate responsibility for the group's preparedness for adapting to climate change and driving our mitigation strategy and does so through chairing all relevant management committees. Our CFO, Phil Aspin, has executive responsibility for risk management and has made climate change and ESG core to the business. The executive management team, through its groups and committees (see structure on page 130), is tasked with assessing and managing the climate-related risks and opportunities and enacting the mitigating actions, for example by ensuring the company has the necessary financial resources and skilled people are in place to achieve its climate-related objectives.

The high value we place on climate and the environment is seen by the fact that most of our board and management committees contribute to our 'create a greener future' strategic priority. This illustrates that climate-related matters influence both day-to-day and strategic decision-making and behaviours, for instance, how we respond to the high costs of energy by focusing on efficiency and maximising use of our self-generated electricity and introducing climate-related criteria into supplier selection evaluations.

Future focus

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

See how climate-related matters are considered within our governance structure on page 130

Read more about our committees including how often they meet and ESG skills on pages 134 and 144

TNFD Governance around nature-related dependencies, impacts, risks and opportunities

Board and committee oversight

The board provides oversight of nature-related issues through six-monthly updates on performance. Matters are regularly reviewed at the ESG committee such as our progress against our Better Rivers plans.

Management role

Our interactions with the natural environment are broad and complex. Overall accountability rests with the executive team, who are responsible for day-to-day compliance with the legal and regulatory requirements as set out in our environmental policy. The environmental advisory group is a management group with a remit to ensure the delivery of the environmental policy commitments, including nature-related strategies (e.g. land, catchment, clean air, plastics, waste, water quality, water resources, and natural capital).

Governance over these strategies is through cross-departmental working groups comprised of subject matter experts and decision-makers to drive implementation. Governance around investment in nature-related risks and opportunities is applied as part of our Internal Control Manual.

Progress this year

- Enhanced our approach to nature-related reporting using the beta release of the TNFD framework guidance.

Future focus

- Communication and engagement across the organisation on the increased interest in nature-related disclosures and reporting.

OTHER Governance around other risks and opportunities of material interest

Cyber security

The board is responsible for the oversight of cyber security and updates are provided to the board at each of its scheduled meetings, with a presentation given by the chief security officer twice a year. The executive team is updated on performance on a monthly basis.

The security steering group (SSG) meets monthly to consider changes to digital and physical security risks and mitigating actions, and to review any incidents. Members of the committee include the company secretary, who has responsibility for security matters and is in attendance at all board meetings, the chief security officer, and representatives from each business unit. The SSG reports security metrics on a quarterly basis to the group audit and risk board, and six-monthly to the board. As it is one of our top ten principal risks, an update on cyber security is provided every six months to the board. The chief security officer reports to the company secretary and, along with the information security team, works closely with the digital services team.

Our information security policies and compliance are aligned to ISO 27001. As a provider of essential services for UK Critical National Infrastructure, we are governed by The Network and Information Systems Regulations, which came into force in 2018 and focuses on cyber security compliance. We are making good progress with our programme of work to comply with these regulations. We are required to comply with the Security and Emergency Measures Direction (SEMD) to maintain plans to provide a supply of water at all times, and this includes security components. A SEMD report is submitted annually to the Drinking Water Inspectorate (DWI) and this is subject to independent attestation prior to submission.

Financial risk management

The board delegates authorities to the treasury committee, which reviews its policies in relation to key financial risks on at least an annual basis, or following any major changes in treasury operations and/or financial market conditions.

As well as managing our exposure to these key financial risks, these policies help us maintain compliance with relevant financial covenants in our borrowings, including interest cover and gearing metrics, and help us to maintain our credit ratings.

Day-to-day responsibility for operational compliance with the treasury policies and the targets set therein rests with the group treasurer. An operational compliance report is provided monthly to the treasury committee, detailing our performance against these policies and highlighting the level of risk against the appropriate risk limits in place, with more detailed management information provided quarterly.

Affordability and vulnerability

The customer services management team has responsibility for the delivery of our affordability and vulnerability schemes, including our certification to ISO 22458 for our Priority Services scheme. The schemes are continuously monitored and performance is reported to the executive performance meeting and the board on a monthly basis. Affordability and vulnerability are reviewed by the board twice a year.

Health, safety and wellbeing

Health, safety and wellbeing matters, including policies and our accreditation to ISO 45001, are managed through the health, safety and wellbeing team and reported monthly to the executive performance meeting. Health, safety and wellbeing is reported to the board every month, with a detailed review twice a year.

Responsible supply chain

The commercial performance team has responsibility for the delivery of our United Supply Chain (USC) programme. Supplier sign ups to our Responsible Sourcing Principles are reported on a monthly basis, alongside other commercial measures, through the executive performance meeting and on to the board.

OTHER Governance around other continued

Equity, diversity and inclusion

We need fantastic people to help us deliver great service to all our customers. We want our workforce to reflect the local communities we serve, with all colleagues feeling welcomed, valued and included, regardless of their gender, age, race, disability, sexuality or social background.

Our award-winning 'We are Better Together' campaign aims to drive a diverse and inclusive workforce. We are proud of how far we have come and in our latest internal engagement survey 89 per cent of colleagues said that United Utilities supports diversity and inclusion in the workplace – scoring higher than both the UK norm and Utilities norm benchmarks and recognising our drive to be an inclusive workplace of choice.

Our people director sponsors the overall equity, diversity and inclusion plan, which sets out our bold, long-term targets to be achieved by 2030, and tracks its progress with the executive team.

We have been recognised as one of the top 15 FTSE company performers when it comes to women in leadership, having exceeded the 40 per cent target for Women on Boards and Women Leaders set by the FTSE 100 Women Leaders Review, tracking at 44.4 per cent and 43.1 per cent respectively. We have been included once again in the Bloomberg LP Gender-Equality Index, which tracks the performance of public companies committed to transparency in gender-data reporting. We are one of 484 companies across 45 countries and regions committed to more equal and inclusive workplaces.

At the 2022 Water Industry Awards, we were Highly Commended for our approach to recruiting a diverse apprenticeship cohort in the Diversity & Inclusion Initiative of the Year. We were also winner of the Inclusive Culture Initiative Award for our 'We Are Better Together' campaign at the 2022 Inclusive Companies Awards, recognising our remarkable efforts and commitment to harness and strengthen a diverse workforce.

We are proud to have been ranked 11th in the Inclusive Companies Top 50 UK Employers list, reinforcing our pledge to take action on diversity and inclusion and recognising our commitment to creating a more equal and inclusive workplace. For the second year running, we are the highest ranking water company in this respected, cross-sector inclusion index.

We have improved our position in the Financial Times Inclusive Leaders Index 2023, which assesses companies' success in promoting diversity aspects, such as gender, age, ethnicity, disability and sexual orientation, in their workforce. We were placed 89th out of 850 companies across Europe, and are the only UK utilities company in the top 100.

Ethnicity

We continue to collect information to build on our diversity data. The percentage of colleagues who choose not to disclose their ethnic origin continues to decrease, currently at 8.2 per cent. The proportion of our colleagues who identify as from an ethnic background stands at 2.7 per cent.

We've committed to supporting the '10,000 Black Interns' programme over the next five years. During the year, we welcomed 23 students onto placements. The programme included 'lunch and learn' sessions with our directors, team-building activities with the local Army Reserves, and a CV and interview skills workshop with specialist recruitment providers.

It was a huge success, with 56 per cent of those who were ready for employment being offered a role with us. 54 per cent of interns from the programme are female, and 60 per cent of interns we offered a role to are female.

Following the success of our first 'Stepping Up' programme in 2021, specifically designed for colleagues from an ethnic minority background, we ran a second cohort for a group of ten colleagues. Over the past two years we've supported 20 people, and 35 per cent of these are female. The programme has provided participants with opportunities to network with senior leaders, sponsors and mentors, and to develop personal and leadership skills to help them fast track their careers with us. Since completing the programme, 50 per cent of participants have already secured a new role and over 40 per cent now manage a team.

Gender

Our workforce profile remains at 65 per cent male and 35 per cent female. We recognise the need to attract diverse and talented individuals with an interest in science, technology, engineering and maths (STEM) and have a focused approach to improving the gender diversity of our workforce.

To inspire young people from a wide range of backgrounds into STEM-related careers, we continue to run our award-winning 'Engineering Masterclass' competition with secondary schools from the local area – some of which have a high number of pupils from deprived and disadvantaged backgrounds. This year, over 80 students took part and 63 per cent of them were female. Following the masterclass, 95 per cent of students said they were extremely interested in pursuing a STEM-related career and 100 per cent said they would recommend the session and now have a better understanding of engineering at United Utilities.

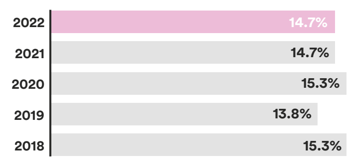
We continue to promote and support strong female role models at all levels of our organisation. Louise Beardmore's appointment as CEO means the percentage of women serving on our board has increased to 44 per cent, while females now make up 50 per cent of our executive leadership team. We offer targeted support for future female talent through our Female Leadership Pipeline and Aspiring Manager Programme, which have been designed to support colleagues into leadership positions. Sixty-seven per cent of colleagues currently on our Aspiring Manager Programme are female. Overall, 42 per cent of our graduates are female and 30 per cent of our apprentices are female.

In the last 12 months, we have welcomed 32 graduates on our schemes and 61 apprentices have also joined us on operational, service and future-facing digital and environmental schemes. Of our new intake, 41 per cent of graduates are female and 35 per cent of apprentices are female, compared to the UK average of 24 per cent for females in STEM roles.

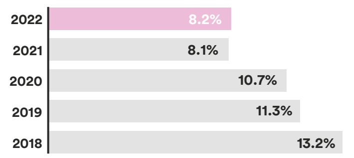
We are pleased that 91 per cent of our current female workforce would recommend us as an employer and 94 per cent say that we support diversity and inclusion in the workplace.

We remain committed to closing the gender pay gap in our organisation. At 14.7 per cent, our median gender pay gap is less than the national average and less than the gap in similar STEM-industry organisations. We are confident that the work we are doing to attract, support and develop women, to build a 'pipeline' of female talent, will bring long-term improvements in our gender pay gap.

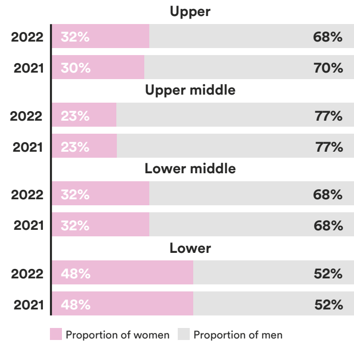
Our median gender pay gap over time



Our mean gender pay gap over time



Percentage of women and men overall and in each quartile of the pay range (figures for 2022 and 2021)



(1) Group board as at 31 March 2023. Includes Steve Mogford.
(2) Executive team excludes CEO, CEO designate and CFO, who are included in group board figures.
(3) As at 31 March 2023, there were six male and three female colleagues appointed as statutory directors of subsidiary group companies but who do not fulfil the Companies Act 2006 definition of 'senior managers'.
(4) Wider colleagues as at 31 March 2023.

Colleague networks

We are committed to providing a supportive and inclusive working environment for all of our colleagues and we recognise that leaders have a clear role when it comes to championing equity, diversity and inclusion. Our leadership team has taken an active part in sponsoring each of our colleague networks, which support colleagues within under-represented communities and focus on educating, raising awareness and celebrating key events – such as Black History Month, International Women's Day and National Autism Week.

Through our networks we have hosted live Q&A sessions with external speakers, including one in partnership with Northern Power Women, and established monthly cafés around the topics of hearing loss, neurodiversity and menopause. We introduced menopause training that everyone in the company can access, and we continued to roll out our 'Pride in the workplace' training, designed to help break down barriers and improve confidence to talk about LGBT+ in the workplace.

We are a Disability Confident employer and we are one of over 20,000 UK employers to have signed up to the Government scheme.

We held our inaugural 'Better Together Inclusion Awards', to recognise individual colleagues and teams for their hard work and commitments towards making United Utilities a more inclusive workplace, and to celebrate the achievements of those colleagues going the extra mile in our wider communities.

Attracting local diverse talent

We've been raising the profile of our commitment to promoting STEM-related careers. During National Apprenticeship Week, our apprentices and early careers team mentored students from University Technical College Warrington, attended four different schools and colleges and hosted the Engineering Masterclass final, with over 80 students from schools in the local area.

We welcomed 600 aspiring apprentices and parents to our first ever apprenticeship open evening and delivered a series of apprenticeship accelerator sessions for students from under-represented communities across the North West. The sessions aim to help students accelerate their careers – focusing on apprenticeships and improving employability prospects and skills.

Our 'Tap into your Future' virtual work experience programme has offered young people in years 11 to 13 an exclusive insight into our business and our fantastic early careers opportunities. The sessions targeted under-represented communities across the North West and attracted over 500 students. A hundred per cent of attendees rate United Utilities as a diverse and inclusive employer, and 76 per cent said they were extremely interested in applying for an apprenticeship after completing the programme.

In the last 12 months, we have created over

£695k

of social/local economic value (TOMS Social Value Portal)

44%

of our group board is female

50%

of our executive team is female

Engaging with our stakeholders

We actively engage with stakeholders to build and maintain trust and ensure we create long-term value for all. Strong, constructive relationships help us understand what matters most to them. The following pages detail how we engage with stakeholders who influence what we do and benefit from the value we create (in dark blue), and those who just influence what we do (in grey), across a range of ESG issues. Our materiality matrix on page 29 details stakeholder priorities and how these affect our ability to create value.

Our stakeholder relationships are subject to robust governance to ensure stakeholder insights are taken into account in decision-making at executive and board level. The board's ESG committee has stakeholder engagement and reputation as one of its standing agenda items, and the chair of the independent customer challenge group (YourVoice) attends board meetings to provide its perspective. Our Section 172(1) Statement on pages 58 to 59 provides examples of some of the ways stakeholder views have influenced key board decisions during the year.

Colleagues

Our colleagues are the face of the company and we could not deliver our services without them, so maintaining productive relationships built on trust is vital to delivering our purpose. Colleagues know our business better than anyone, with a diverse range of views and experience, making them well placed to help us identify new ways of working and opportunities for improvement.

How we engage

- Annual opinion survey enabling confidential feedback
- Regular manager one-to-one meetings providing two-way engagement
- Colleague Voice panel providing a link to the board
- Monthly trade union forums

Top three material issues

- Colleague engagement
- Diverse and skilled workforce
- Health, safety and wellbeing

Communities

Our work puts us at the heart of local communities, places where customers and colleagues live and work. We want to support them to be stronger and increase understanding of the impact and contribution our work has on everyday life. We balance decisions based on often competing stakeholder interests and look to develop collaborative and partnership solutions where feasible.

How we engage

- Face-to-face meetings with local and parish councils to discuss projects
- Online portals for large capital projects to get the views of communities where we are working
- Facilitated workshops with partners to scope out solutions
- Public events across the region to promote sustainable uses

Top three material issues

- Land management, access and recreation
- Supporting communities
- Trust, transparency and legitimacy

Customers

To deliver value for customers, we need to understand their short-term issues, and longer-term expectations of us as their water company. As expectations change, we need to evolve our services to ensure we meet them. We actively seek feedback on what customers think about us so we can make our services better and address the issues that matter.

How we engage

- Contacts through our operational call centre and social media channels
- Visits to customer properties to resolve issues. Direct customer research on our service provision
- Face-to-face engagement with groups representing vulnerable customers, such as MIND

Top three material issues

- Drinking water quality
- Customer service and operational performance
- Affordability and vulnerability

Environment

We depend on the environment and have a key role in protecting and enhancing it across the North West. We engage with interested groups such as environmental regulators, non-governmental organisations, campaigners and local communities to find the best ways to tackle environmental issues, like climate change and land management. Working together is often the best way to find the right solution.

How we engage

- Meetings with national and regional environmental regulators, such as the Environment Agency
- Customer research to shape our investment plans
- Events such as our Environmental AGM
- Partnerships where we have common interests

Top three material issues

- Storm overflows
- Climate change
- Water resources and leakage

Investors

It is important that investors have confidence in the organisation and how it is managed. We provide regular updates to debt and equity investors and meet with many top investors to establish two-way dialogue about matters of interest to them. Increasingly, this includes environmental, social and governance (ESG) updates alongside financial and performance data.

How we engage

- Capital market days and investor roadshows
- Annual general meeting open to all shareholders
- Direct dialogue with relationship banks and credit agencies
- Participation in investor-led ESG ratings and indices

Top three material issues

- Customer service and operational performance
- Financial risk management
- Corporate governance and business conduct

Suppliers

We rely on suppliers to deliver our services. Good relationships help ensure projects are delivered on time, to good quality, at efficient costs. Awareness of issues in the supply chain means we can address them together and become more resilient. Supplier engagement can also help us identify and realise innovative approaches and solutions.

How we engage

- Directly through supplier relationship management process and United Supply Chain (USC)
- Setting challenges through our Innovation Lab
- Supplier databases such as Achilles, to assess market opportunities

Top three material issues

- Trust, transparency and legitimacy
- North West regional economy
- Responsible supply chain

Media

The media is influenced by stakeholders' interests, and in turn influences them through what it reports. Many people receive their information about us and our activities from traditional and/or social media, so it is important that coverage is fair, balanced and accurate. This requires effective two-way dialogue between the company and the media, and we provide media training to key senior managers to facilitate this.

How we engage

- 24/7 press office available to respond to media requests and publish content for direct media use
- Dedicated social media team covering multiple channels
- Active media and social monitoring focused on the company and sector

Top three material issues

- Storm overflows
- Customer service and operational performance
- Trust, transparency and legitimacy

Politicians

Politicians influence the long-term national water strategy and environmental priorities, matters that affect how all businesses operate, and champion issues raised by their constituents. Local government, elected representatives and devolved administrations provide insight into shared social, environmental, economic and governance issues across the North West.

How we engage

- Direct engagement with regional and national politicians across the spectrum, and working groups with devolved administrations and local authorities on common interests
- Direct engagement with parish councils linked to planning applications
- Responding to enquiries through our corporate affairs team

Top three material issues

- Political and regulatory environment
- Customer service and operational performance
- Affordability and vulnerability

Regulators

Through proactive, constructive engagement with economic, quality and environmental regulators, we understand requirements and deliver against commitments over specified time periods, aiming to meet or exceed the expectations they have of our business. We actively engage in events such as workshops and respond to consultations to contribute towards the policy and regulatory framework in which we operate, covering customer, economic, environmental, social and governance matters.

How we engage

- Regular meetings with all regulators on objectives and performance
- Responses to consultations and contributing to policy debates on how regulation could evolve

Top three material issues

- Political and regulatory environment
- Customer service and operational performance
- Resilience

We value the diverse perspectives that a broad range of stakeholders, representing different and often competing interests, can bring to our decision-making.

S172(1) Statement

Our key decisions during the year to 31 March 2023

Introduction

Throughout this integrated annual report, we provide examples of how the board has thought about the likely consequences of long-term decisions and how we:

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

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

The board of directors of United Utilities Group PLC consider, both individually and together, that they have acted in the way they consider, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole and having regard (amongst other matters) to factors (a) to (f) s172 Companies Act 2006, in the decisions taken during the year ended 31 March 2023 including:

Our strategic priorities

Improve our rivers | Create a greener future | Provide a safe and great place to work | Deliver great service for all our customers | Spend customers' money wisely | Contribute to our communities

Cyber security

Link to strategy

The decision

To respond to calls from investors and company commentators on the board's oversight of cyber issues and security. Cyber risk ranked as a top ten risk at United Utilities and this has been the case since 2019. The board receives presentations from the chief security officer, who reports functionally to the company secretary, twice a year, providing the board with insight into mitigation activities employed by the group in response to the evolving threat of cyber and physical security attacks. The board is kept apprised of developments in this area, and, in particular, matters impacting the water and other utility sectors. During the year, the audit committee, as part of its responsibility for financial internal controls, received a presentation on the management and assurance of the IT controls environment and its contribution toward mitigation of cyber crime. The board spends time understanding the increasing threats to the group's cyber/digital security and overseeing management's actions to mitigate the risk of a serious cyber attack (see pages 53 and 69), with board members providing their experience of similar issues faced by other sectors to the board's discussions. Our Systems Thinking approach real-time digital monitoring capabilities have produced significant operational performance improvements, but adversely raised the risk of cyber attack, in a similar way to that of hybrid working.

How we engaged with stakeholders

Preparedness to mitigate cyber attacks is a topic investors are often keen to explore. As a provider of essential services for UK Critical National Infrastructure, the group is governed by The Network and Information Systems Regulations (NIS Regulations), which came into force in 2018 and focus on cyber security compliance; monitoring/enforcement of these regulations is within the remit of the DWI. The group is required to comply with the Security and Emergency Measures Direction (SEMD) which directs water undertakers to maintain plans to provide a supply of water at all times and includes security components. A SEMD report is submitted annually to DWI and is subject to independent attestation prior to the submission. Colleagues are encouraged and trained to be vigilant to phishing and cyber attacks and a variety of modern protective defence tools are employed to protect our systems and data.

The board's view

The group's information security policies and compliance are aligned to ISO 27001. Good progress is being made with the programme of work to comply with the NIS Regulations, although the evolving nature of the sector-specific profile defined by the DWI can be challenging.

The board is strongly averse to accepting cyber risk within the group's business strategy or operational activity. The approach to the protection of information and data held by the group about its assets and operations, customers and colleagues is aligned with the group's strategic priority of delivering great service for all customers and the board believes that this would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

Better Rivers: Better North West

Link to strategy

The decision

Storm overflows help to minimise the risk of sewer flooding in periods of heavy rainfall by allowing heavily diluted wastewater to be released directly to the environment. The group committed to four pledges in its Better Rivers: Better North West programme to underpin a revival of rivers across the North West region. £230 million has been committed to deliver environmental improvements, supporting at least a one-third sustainable reduction in the number of activations recorded from our storm overflows by 2025 compared to the 2020 baseline, leading to 184 kilometres of improved waterways across the group's region. We have committed to accelerate these plans and get a head start on future requirements through £250 million of reinvestment funded from outperformance, to take action to improve river health across our region and make other environmental improvements.

How we engaged with stakeholders

Collaborative action will deliver the best results for our region, and an important step in the journey was the organisation and participation in the Future Rivers Forum in November 2022, which brought together representatives from environmental NGOs, businesses, local authorities and our regulators to focus on identifying new collaborations and collective actions to improve river health. Customers have told us we must report on the steps we are taking to improve river health. Our storm overflows report was published in December 2022, coinciding with the holding of the first Environmental AGM, which was attended by over 30 North West environmental leaders including representatives from local nature partnerships, wildlife trusts, rivers trusts, combined authorities and other environmental stakeholders. A new partnership was launched with farmers to work with the farming community to incentivise farming practices that reduce the impact to river health, share best practice and develop sustainable farming clusters.

The board's view

Storm overflow activations are a big area of focus for the whole industry as part of improving river health. Following keen interest from the public and government, and publication of the new Environment Act 2021, ambitious targets have been set for a progressive but substantial reduction in activation frequency across the country. The North West receives 28 per cent more average annual water runoff than other regions and the industrial legacy of our region means we have a much higher proportion of combined sewers, with 55 per cent of our network taking both waste and surface water, compared with the industry average of 33 per cent.

We were an early adopter of activation monitoring and have one of the largest installed bases in the sector, with 100 per cent coverage to be achieved by 2023. Our Better Rivers programme is delivering improvements that support our target of at least a 33 per cent reduction in activations by 2025, from a 2020 baseline. We have already made great headway, delivering a 39 per cent reduction so far. We are conscious that performance can be significantly influenced by weather and while we are extremely pleased with the progress delivered so far, we recognise that there is more we could do, both individually and as a sector. The Government has asked us to go faster, and we have responded by identifying additional investment that could be spent in AMP7 but would be fully recovered in AMP8. We are still early in the process of scoping and costing our environmental programme for AMP8, but as a result of these targets and other drivers coming out of the Environment Act, early indications point to an investment that could be significantly higher than the average level over the last two AMP periods. Given the size of this potential investment, we are in discussions with regulators about balancing the pace of investment in light of affordability and deliverability considerations, and the investment needed to meet these new environmental requirements is likely to run over successive AMP periods.

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

Water Industry National Environment Programme (WINEP)

Link to strategy

The decision

Approval of the 2025–30 WINEP that sets out how United Utilities intends to meet its obligations from environmental legislation and UK Government policy.

How we engaged with stakeholders

We have been working in collaboration with our regulators, Ofwat, the Environment Agency, Natural England and Defra, and our suppliers who are key to helping us deliver our programme.

The board's view

The company has taken all reasonable steps to deliver a high-quality WINEP programme that offers 'best value' as defined by the WINEP Options Development Guidance[1] as well as the Water Industry Strategic Environmental Requirements (WISER) based on a sound and robust evidence base.

In relation to the 'affordable to deliver' requirement for a best value plan, the company has sought to make the plan as affordable as possible. However, the WINEP and WISER requirements are driving a programme of very significant size and scale and with an ambitious timetable for implementation. This means that it is not possible at the time of the WINEP final submission in January 2023 to conclude that the programme would be affordable to customers as a whole. The company will continue to engage with the UK Government and regulators to understand the scope to improve this position. The WINEP programme has been subject to sufficient processes and internal systems of control to ensure the reliability of information and has been assured in line with the published assurance framework. The company has appropriately considered the feedback and recommendations from independent external assurance partners. Notwithstanding the board's support for the submission, it highlighted the considerable risk associated with the programme including the risk relating to: affordability, deliverability, the long-term impact on operating costs, the impact on whole-life carbon, and the impact on operational and delivery performance. The submission of the WINEP is a statutory requirement and having taken all reasonable steps to deliver a high-quality WINEP programme the board believes our proposed programme is one that would be most likely to promote the long-term success of the company for the benefit of its members as a whole.

[1] Water industry national environment programme, Options development guidance, July 2022, version 3.

Risks and opportunities

In this section you will find:

Our risk and resilience framework

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

Our approach to risk and resilience

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

- Provide a safe and great place to work;
- Deliver great service for all our customers;
- Improve our rivers;
- Create a greener future;
- Spend customers' money wisely; and
- Contribute to our communities.

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

Key components of the framework include:

- an embedded group-wide risk management process, which is aligned to ISO 31000:2018 risk management guidelines;
- a board-led approach to risk appetite, based on strategic goals;
- a strong and well-established governance structure giving the board oversight of the nature and extent of risks the group faces, as well as the effectiveness of risk management processes and controls; and
- a portfolio of policies, procedures, guidance and training to enable consistent, group-wide participation by our people.

Continuous improvement is a key feature of the framework, which incorporates a maturity assessment model to identify areas to enhance. Based on risk management capabilities relative to five levels of maturity, a recent assessment has supported the development of a road map of improvements. This includes the enhancement of non-financial assessment criteria by aligning to the six capitals (see page 34) to ensure a consistent consideration of key stakeholders and areas of value; an improved focus on control; and the continued development of tactical appetite and tolerance statements.

Identifying opportunities

Factors from both the internal and external business environment may give rise to opportunities that will positively affect our performance and future prospects. The identification, analysis and management of upside as well as down side risk will further support the achievement of the strategic priorities, with our Systems Thinking approach and culture of innovation being a fundamental component (see pages 62 to 63).

Governance and reporting process

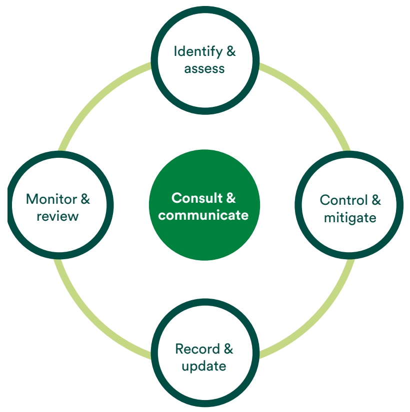
The risk management and governance and reporting process, as summarised on page 52, can be represented by the following diagram:

Risk appetite and tolerance

Focused on supporting decision-making, the risk appetite and tolerance framework consists of a package of measures. The General Risk Appetite represents financial limits against which event-based risks are compared at each full and half-year assessment and reporting cycle. In parallel are a series of strategic statements which align directly to the principal risks (see pages 64 to 65). Each statement reflects the strategic intent, strategic priority, relevant stakeholders and governance, but fundamentally emphasises the attitude to risk taking and control relative to four descriptors:

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

As a regulated company providing essential public services, none of the principal risks have risk accepting as a strategic direction or approach. Underpinning each strategic statement, and currently under development, are a series of more tangible tactical statements with specific levels and limits.



How we identify and assess risk

We have a number of mechanisms in place to identify risk. These include a risk universe, cross-business horizon scanning forums, consultation with third parties and comparison with National Risk Registers. Each risk is event based and is sponsored by a senior manager who is responsible for the ongoing analysis of the corresponding causal factors, consequences and the control effectiveness, taking account of both the internal and external business environment. This process quantifies the likelihood of the event occurring and the full range of potential impacts from a minimum (best case) to a maximum (worst case). Comparing this position against the desired target state, in combination with the strengths, weaknesses and gaps of the control environment, supports the decisions for further mitigation as appropriate. Risks are assessed both bottom-up, through the biannual business assessment process, and top-down through review of the risk profile at the executive group audit and risk board (GARB), executive performance meeting and the group board. This approach ensures reporting reflects the risks facing the company, serves to calibrate the most significant risks from a financial and reputational context and enables assessment of the risks relative to our appetite.

Risk profile

The business risk profile is based on the value chain of the company, with the ten principal risks representing inherent risk areas (primary and supportive) where value can be gained, preserved or lost relative to the performance, future prospects or reputation of the company. Underpinning the principal risks, the profile consists of approximately 100 event-based risks, each of which is allocated to one of the ten inherent risk areas based on the context of the event, enabling the company to consider interdependency and correlation of common themes (see pages 64 to 65) and control effectiveness.

Principal risk heat map

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

Seven of the principal risks have remained relatively stable in the last 12 months with the following principal risks demonstrating an increase in exposure:

- **Finance** due to current economic conditions and uncertainty;
- **Conduct and compliance** due to the potential for increased penalties; and
- **Political and regulatory** due to increased public and political interests in the water sector and societal expectations.

Read more about **our principal risks** on pages 64 to 65 and **new and emerging risks** on pages 74 to 75

Risk exposure

An indication of the current exposure of each principal risk relative to the prior year. Decreased Stable Increased

Principal risks

1 Water service
2 Wastewater service
3 Retail and commercial
4 Supply chain and programme delivery
5 Resource
6 Finance
7 Health, safety and environmental
8 Security
9 Conduct and compliance
10 Political and regulatory

Fostering a culture of innovation

We embrace technology and seek innovative solutions to create opportunities that help us tackle the challenges we face and continue improving performance.

This is at the heart of our Systems Thinking approach, as set out on page 63.

We use a variety of methods to find novel ideas and solutions from different sources, internally and externally, including idea scouting, learning from other water companies across the world, and from other industries.

Culture

Our core values drive an innovative culture, and we encourage innovation at all levels inside the business, such as our CEO Challenge programme where graduates work in groups to find novel ways to tackle challenges that we face as a business and present these back for consideration and implementation.

Innovation Lab

Our Innovation Lab, currently undergoing its fifth programme, encourages suppliers to bring us innovative ideas and allows them to test solutions in a live environment, helping us find solutions where we may not otherwise have looked.

AMP7 innovation fund

Recognising the service and efficiency improvements that innovation can offer, Ofwat has established an innovation fund through which companies bid for funding for innovative projects.

We have been involved in successful bids to influence over £80 million of projects, leading on seven totalling £28.2 million. This includes the Catchment Systems Thinking Cooperative where we are working with others to revolutionise the way crucial data about the water environment is shared, with a particular focus on river health. We have already delivered one leading project and expect to complete a second in 2023.

Working with others to find mutual benefit solutions

We do not operate in isolation and we recognise that working with others can create significant opportunities to identify and develop better solutions.

This co-operative approach can take many different forms, such as summits that bring people from a variety of different organisations together to discuss and formulate ideas, co-creation of solutions with customers or other interested parties, and forming partnerships to tackle issues of mutual interest together.

Affordability and vulnerability summits, and the Hardship Hub

This year we hosted our first vulnerability summit and fourth affordability summit, bringing together a mix of organisations from across the North West, including debt advice charities, the Department for Work and Pensions (DWP), councils, housing associations and other utility companies, to discuss what more can be done to support people who are struggling. Our first affordability summit led us to develop the Hardship Hub, a platform that helps debt advisers gain and share knowledge on local support schemes, allowing them to help people more quickly and easily.

Future rivers forum

We partnered with The Rivers Trust to host a Future Rivers Forum in November 2022, looking at how we can address the challenges that face rivers in the North West, such as climate change, population growth and pollution. This is a problem that cannot be solved in silos; it needs practical, collaborative action. Industry leaders from a variety of sectors worked together to produce solutions and tangible actions that will progressively reduce negative impacts to river health. This is one of many areas where we are working with others to improve river water quality, including recruiting river rangers through our Better Rivers plan.

Love Windermere

We are a part of the Love Windermere partnership, led by the Environment Agency, which is working to better understand the factors affecting water quality and develop long-term plans to maintain and improve water quality in the lake while balancing the needs of nature, the community and the local economy.

This plan will set out a road map for environmental protection that could be replicated across the UK, and considers the way that farmland is managed around the lake, how rainwater drains from built-up areas, and the way that wastewater systems and private septic tanks are managed.

Diversity and inclusion summit

In April 2022 we hosted our first diversity and inclusion summit, bringing lots of organisations and businesses together to share ideas and best practice to help grow more inclusive workplaces and communities across the North West.

Severn-Thames transfer scheme

Working with others goes beyond our region, and we are collaborating with other water companies on a national water trading scheme as part of the national strategy for managing the risk posed by increasing dry weather, and doing so in a way that minimises the carbon impact.

Systems Thinking

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

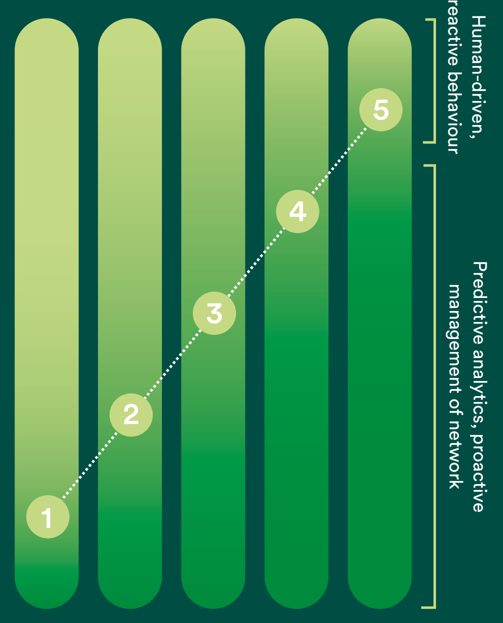
Systems Thinking capability maturity

We assess new opportunities against five capability maturity levels.

At the lower levels there is a high degree of human intervention and reactive behaviour.

At the higher levels there is a high degree of predictive analytics, use of artificial intelligence to process vast amounts of data, joined up decision-making across the system, and higher levels of automation.

It requires time and investment to reach the higher levels, and we are at different levels in different areas of our business as we continue to embed and progress our approach.



1 **Maturity level 1**
Event-led human-driven analytics

2 **Maturity level 2**
Centralised view of system performance

3 **Maturity level 3**
Technology-enabled, standardised analytics and insight

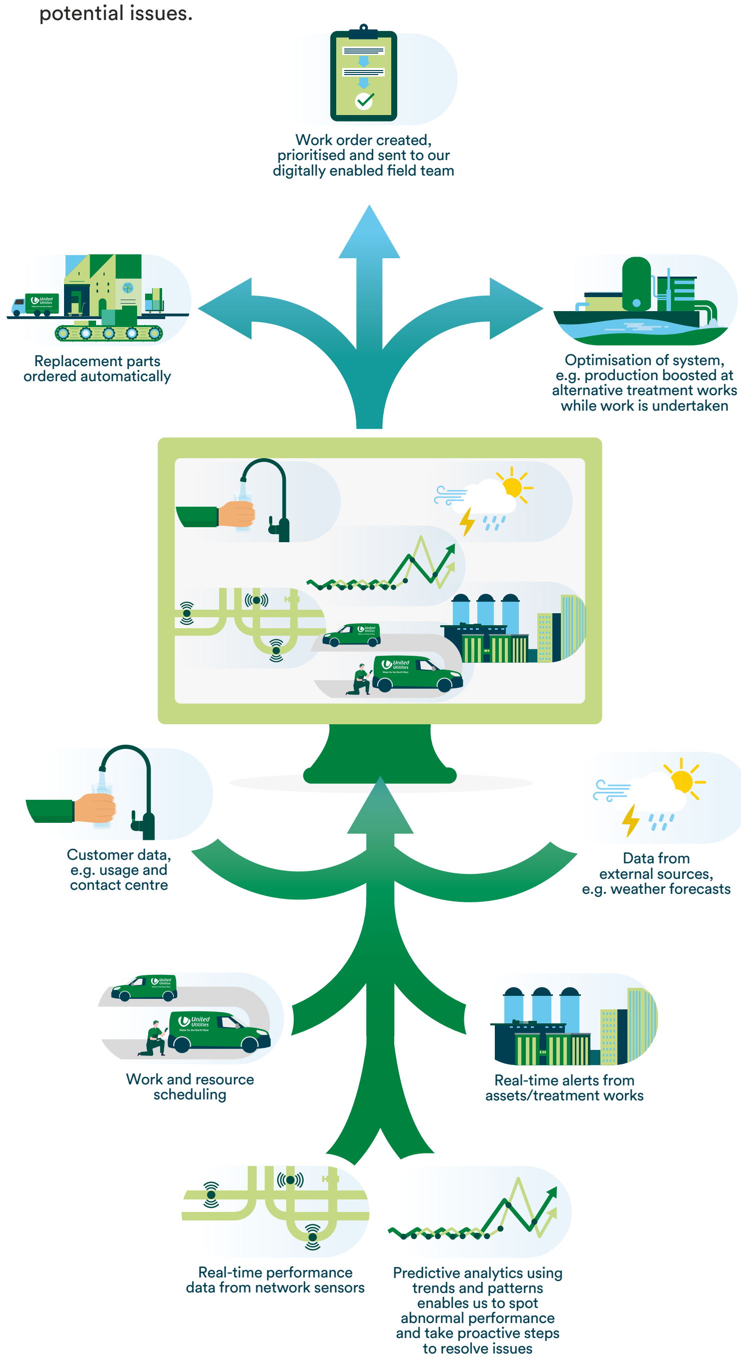
4 **Maturity level 4**
Machine-led system analytics and system management

5 **Maturity level 5**
Machine intelligence provides full system control

Stock code: UU.

Central system management from our Integrated Control Centre

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



Risks and opportunities

Our strategic priorities

- Improve our rivers
- Create a greener future
- Provide a safe and great place to work
- Deliver great service for all our customers
- Spend customers' money wisely
- Contribute to our communities

Our principal risks

Risk exposure
An indication of the current exposure of each principal risk relative to the prior year.

Decreased | Stable | Increased

Inherent risk area (principal risk)[1]	Strategic priority	Sponsor(s)	Principal risk description	Causal themes (Drivers/influences)	Consequence themes	Appetite and tolerance[2]	Control/mitigation	Top five event-based business risks (*most significant risks – see pages 68 to 69)
1 Water service		• Chief operating officer	A failure to provide a secure supply of clean, safe drinking water and the potential for a negative impact on public confidence in water supply.	• Asset health • Demographic change • Extreme weather/ climate change • Legal and regulatory change • Technology	• Customers • Environment • Investors	**Water** Averse	• Strict quality controls and sampling regime • Physical and chemical treatment with automation • Cleaning, maintenance and replacement of assets • Water resources and production planning • Pressure/flow management and leak detection • Integrated network and response capability	• Failure of Haweswater Aqueduct* • Water sufficiency* • Dam failure* • Failure to treat water • Failure of the distribution system (leakage)
2 Wastewater service		• Chief operating officer	The failure to remove, treat and return water and sludge to the environment.	• Asset health • Demographic change • Extreme weather/ climate change • Legal and regulatory change • Technology	• Customers • Environment • Investors	**Wastewater** Prudent **Bioresources** Moderate	• Physical/chemical treatment and sampling/testing systems • Customer campaigns • Odour management • Drainage and wastewater management plans • Wastewater network operating model • Cleaning, maintenance and replacement of assets • Better Rivers programme	• Wastewater network failure* • Recycling biosolids to agriculture* • Failure to treat sludge* • Wastewater treatment • Mersey Valley Sludge Pipeline
3 Retail and commercial		• Customer services director • General counsel and company secretary	Failing to provide good and fair service to domestic customers and third-party retailers or a failure of, or issue in relation to, non-regulated interests.	• Asset health • Culture • Economic conditions • Legal and regulatory change • Technology	• Customers • Investors	**Retail** Moderate **Commercial** Moderate	• Customer-focused initiatives • Best practice collection techniques • Customer segmentation • Priority Services scheme • Data management and data sharing • Non-regulated operation governance	• Cash collection • Customer experience • Wholesale revenue collection • Failure to maintain meters • NAV market obligations
4 Supply chain and programme delivery		• Capital delivery, engineering and commercial director	The potential ineffective delivery of capital, operational or functional processes/ programmes including change.	• Economic conditions • Legal and regulatory change • Technology	• Communities • Customers • Environment • Investors • Suppliers	**Supply chain** Prudent **Programme delivery** Moderate	• Category management • Supplier relationship management • Capital, change and operational programme management • Engineering technical specifications • Portfolio, programme and project risk management	• Security of the supply chain • Price volatility • Unfunded developer programmes • Dispute with supplier • Deliver partner failure
5 Resource		• People director • Health, safety and wellbeing and estate services director • Chief operating officer	The potential failure to provide appropriate resources (human, technological or physical) required to support business activity.	• Asset health • Culture • Economic conditions • Extreme weather/ climate change • Legal and regulatory change • Technology	• Colleagues • Customers • Investors	**Resource** Moderate	• Adoption of effective technology • Multiple communication channels • Training and personal development • Talent, apprentice and graduate schemes • Change programmes and innovative strategies • Maintenance, replacement or renovation of assets	• Failure of digital systems • Employee relations • Quality of critical data • Land management • Digital licensing
6 Finance		• Chief financial officer	The potential inability to finance the business appropriately.	• Asset health • Demographic change • Economic conditions • Legal and regulatory change • Technology	• Colleagues • Customers • Investors	**Finance** Prudent	• Long-term refinancing • Liquidity reserves • Counterparty credit exposure and settlement limits • Hedging strategies • Sensitivity analysis • Monitoring of the markets	• Totex efficiency challenge* • Credit ratings* • Erosion of pension scheme surplus* • Financial outperformance* • Unavoidable additional taxes
7 Health, safety and environmental		• Environment, planning and innovation director • Health, safety and wellbeing and estate services director	The potential harm to colleagues, contractors, the public or the environment.	• Asset health • Culture • Extreme weather/ climate change	• Colleagues • Communities • Environment • Investors • Suppliers	**Health, safety and wellbeing** Averse **Environment** Averse	• Strong governance and management systems • Certification to ISO 45001 and ISO 14001 • Benchmarking, auditing and inspections • Targeted engagement and improvement programmes • Carbon reduction initiatives • Self-generation of green energy	• Carbon commitments* • Disease pandemic* • Occupational health exposure • Process safety • Minor injuries
8 Security		• General counsel and company secretary	The potential for malicious activity (physical or technological) against people, assets or operations.	• Asset health • Culture • Economic conditions • Technology	• Colleagues • Communities • Customers • Investors • Suppliers	**CNI and SEMD** Averse **Other** Prudent	• Physical and technological security measures • Strong governance, inspections and audits • Security authority liaison and NIS compliance • System and network integration • Business continuity and disaster recovery • Incident support service	• Cyber risk* • Terrorism* • Criminality • Fraud • Data protection
9 Conduct and compliance		• Corporate affairs director • General counsel and company secretary	The failure to adopt or apply ethical standards, or to comply with legal and regulatory obligations and responsibilities.	• Asset health • Culture • Demographic change • Economic conditions • Extreme weather/ climate change • Legal and regulatory change	• Colleagues • Communities • Customers • Environment • Investors • Suppliers	**Legislation** Averse **Other** Prudent	• Ethical supply chain, diversity and inclusivity policies • Data classification and levels of authorisation • Stakeholder engagement activities • Audits and peer reviews • Governance, risk assessment and horizon scanning • Brand comparisons and dashboard of culture metrics • Regulatory reporting	• Water Plus • Procurement compliance • Bribery risk • Non-regulated asset • Corporate governance and listing rules compliance
10 Political and regulatory		• Corporate affairs director • General counsel and company secretary • Strategy, policy and regulation director	Developments connected with the political, regulatory and legislative environment.	• Economic conditions • Legal and regulatory change	• Colleagues • Customers • Environment • Investors	Cannot be determined due to no genuine choice or control	• Consultation with government and regulators • Consultation and communication with customers • Governance, risk assessment and horizon scanning • Development of regulatory policy and strategy	• Price Review 2024 outcome* • Upstream competition (bioresources) • DPC delivery of HARP • ASHE index • Upstream competition (water resource)

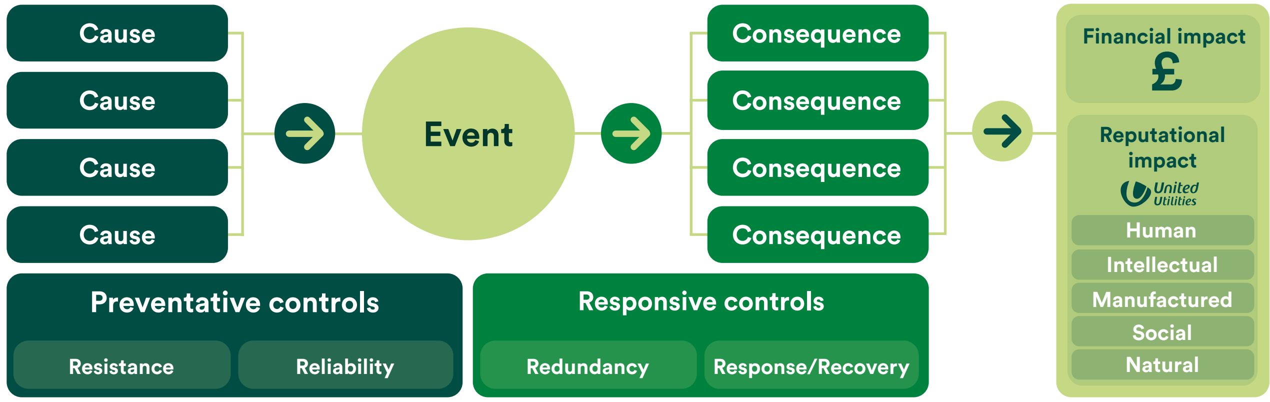
Notes

[1] Principal risks: based on the value chain of the company, principal risks represent inherent areas where value can be can be gained, preserved or lost. Water, wastewater (including bioresources) and retail and commercial areas are the primary inherent risk areas with all other areas being supportive or contributing activities.

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

Common themes

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



Common causal themes

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

- **Asset health:** General use, exposure to natural hazards, pressure and load all contribute to the deterioration of assets. In addition, other factors such as technological obsolescence and operating assets beyond their optimal capacity to cope with increased demand (population growth and/or climate change) also affect asset health. Asset health is a cross-business risk as it can affect operational efficiency and resilience.
- **Culture:** Embedded through processes, reward mechanisms, values and behaviours, corporate culture cuts across the majority of risks including: service delivery; recruitment and talent management; colleague engagement; security; and our reputation to multiple stakeholders. In an increasingly challenging business environment, our focus is to continue to embed a culture of delivering benefit to customers and communities, taking accountability and seeking new and innovative ways to deliver our services more efficiently and effectively.
- **Demographic changes:** Population growth/shift and evolving age profiles can impact the capacity and capability of water and wastewater treatment and network assets, can affect demand on water resources, and increase uncertainty in relation to pension obligations.
- **Economic conditions:** Macro events can have multiple financial implications, including: lower revenue; reduced cash collection; increased operational cost through inflationary pressures; and increased cost of borrowing.
- **Extreme weather/climate change:** Our water resources, asset base and operations can generally cope with extreme weather conditions, although they can become overwhelmed in intense situations. Climate change projections highlight increased temperatures, rainfall, wind and more frequent extreme variations in weather patterns. Climate change will affect both our capacity and capability for service delivery, and the environment that we strive to protect and enhance. It is therefore a key focus and we are committed to the principles set by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) – see page 05.
- **Legislative and regulatory change:** Changes in, or the interpretation of, legislation and regulation can have implications for our business model, asset base and ways of working.
- **Technology:** Increased automation, system integration and artificial intelligence, against the backdrop of Systems Thinking, provides competitive advantage and improves efficiency and user experience for our colleagues, suppliers and customers. However, there is an increased capital requirement to keep pace with technological change, challenges in short-term adaptability of the workforce, and data and security threats as systems converge.

Common consequence themes:

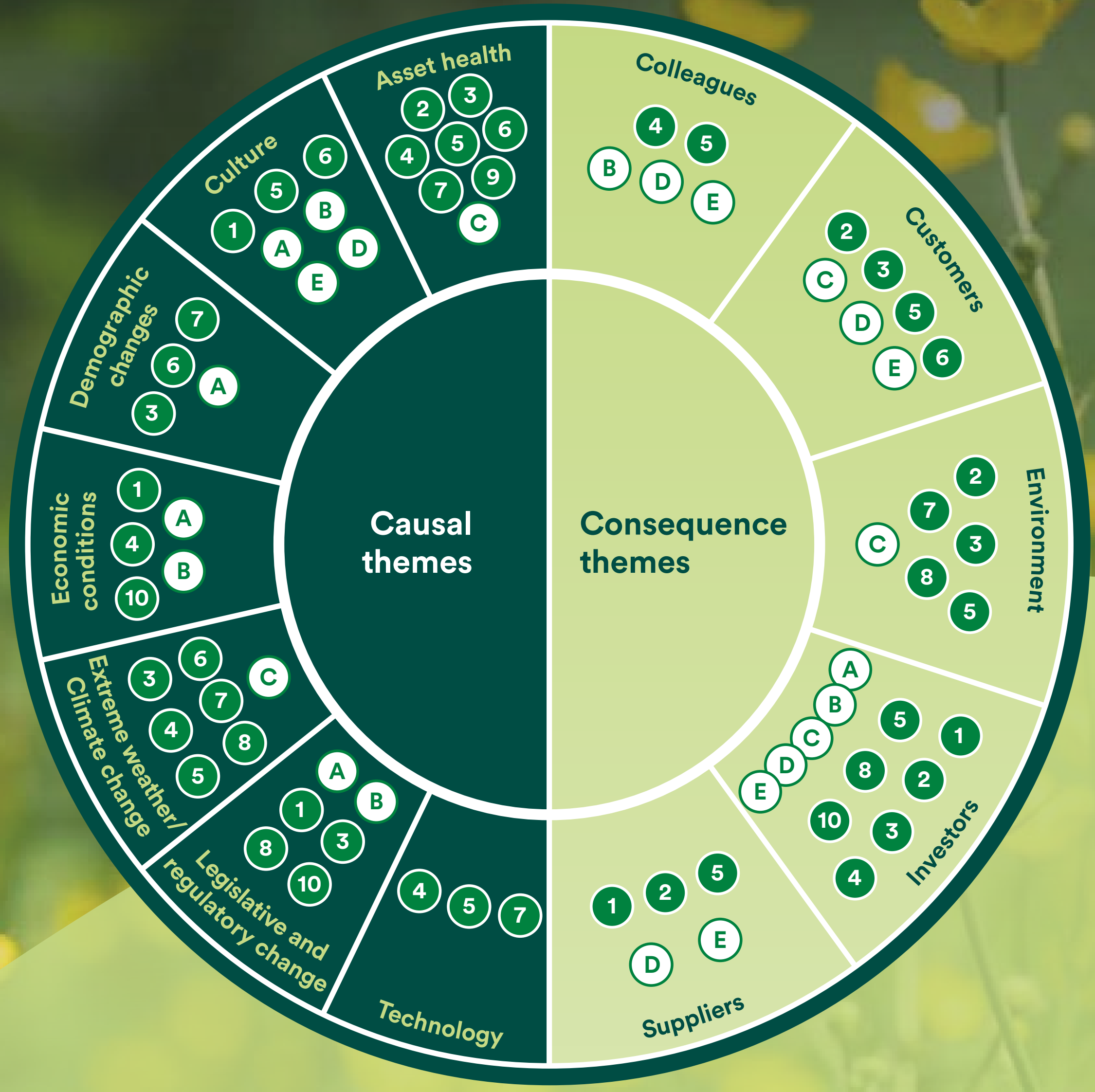
Each consequence is analysed for the financial and reputational (non-financial) implications relative to multiple stakeholders. Categorisation of the consequences illustrates five common impact themes:

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

The company's most significant event-based risks

Mapping of common themes to the most significant group risks

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



Most significant event-based risks

1. Price Review 2024 outcome
2. Failure of the Haweswater Aqueduct
3. Wastewater network failure
4. Totex efficiency challenge
5. Cyber
6. Water sufficiency
7. Carbon commitments
8. Recycling of biosolids to agriculture
9. Failure to treat sludge
10. Credit ratings

A. Erosion of pension scheme surplus
B. Financial outperformance
C. Dam failure
D. Disease pandemic
E. Terrorism

Key

- Top ten ranking risks relative to likelihood and impact
- High impact, low likelihood risks

The company's most significant event-based risks continued

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

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

Key

Top ten ranking risks relative to likelihood and impact — High impact, low likelihood risks — TCFD Climate-related risk

1. Price Review 2024 outcome (TCFD)

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

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

Assurance: Extensive customer research and several external providers have been commissioned for technical optioneering. Second line assurance is provided through a dedicated price review team and a PR24 programme board. There is a blend of internal audit and external assurance focused on the quality of the submission.

2. Failure of the Haweswater Aqueduct (TCFD)

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

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

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

3. Wastewater network failure (TCFD)

Risk exposure: Blockages, operational issues or inadequate hydraulic capacity relative to population growth, extreme weather, asset health, and legal/regulatory change, resulting in unpermitted storm overflow activations, sewer flooding and environmental damage.

Control/mitigation: Preventative maintenance and inspection regimes, customer campaigns, sewer rehabilitation programme and Better Rivers programme.

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

4. Totex efficiency challenge

Risk exposure: Totex efficiencies designed for AMP7 are under significant challenge through a combination of factors including supply chain issues, inflationary pressures, and additional investment to deliver performance improvements.

Control/mitigation: Integrated Business Planning (IBP), risk-based investment prioritisation and the company business planning process all contribute to efficient delivery of services and the capital programme. In addition, there are number of executive led initiatives to realise efficiency opportunities.

Assurance: First line assurance is undertaken through monthly price control meetings, with the strategic programme board, monthly executive performance review meetings and quarterly business reviews providing second line governance and assurance. Third line assurance is undertaken through cyclical internal audits.

5. Cyber

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

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

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

6. Water sufficiency (TCFD)

Risk exposure: Water sufficiency is one of the most sensitive risks to climate change, with the increased frequency of hot and dry weather being evidence of changing circumstances. Extended periods of low rainfall and exceptionally hot weather, with accompanying increased customer demand, impacts our water resources which can result in the need to implement water use restrictions.

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

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

7. Carbon commitments (TCFD)

Risk exposure: The capacity and capability to decarbonise water and wastewater activity to meet commitments and legal obligations across the various time horizons of 2030, 2035 and 2050 in light of expected population growth pressures and uncertainty regarding the required technological advances to decarbonise operational activity.

Control/mitigation: In the near-term we are creating woodland, restoring peatland and have initiatives to address process and energy emissions. We are working with suppliers and industry partners to better understand and optimise decarbonisation opportunities and pathways.

Assurance: First line assurance by carbon team using water industry team for technical support and guidance. Climate change mitigation steering group and corporate risk framework provide second line assurance. Our science-based targets, energy and carbon reporting are subject to external assurance and verification.

8. Recycling of biosolids to agriculture (TCFD)

Risk exposure: Represents various impact scenarios including operational failures, increased restrictions or total ban of recycling biosolids to agriculture. The risk considers the Environment Agency's interpretation of the Farming Rules for Water regulations and the increasing threat to recycling a large proportion of biosolid to land.

Control/mitigation: Treatment, sampling and testing regimes ensure that sludge meets acceptable standards for application with formal service level agreements between wastewater and bioresources. We work closely with farmers, land owners and contractors to ensure regulations such as Farming Rules for Water and the standard operating procedures are met.

Assurance: Bioresources production planning team undertakes first line assurance against UK Biosolids Assurance Scheme (BAS) accreditation, and other codes of practice such as the safe sludge matrix which certifies our recycling activities. Second and third line assurance is also undertaken by the assurance and internal audit teams respectively.

9. Failure to treat sludge (TCFD)

Risk exposure: Relates to the interdependency between wastewater and bioresources treatment activity in light of changing demographics, asset health and legislative/regulatory change such as the Industrial Emissions Directive (IED) now applying to biological treatment of sewage sludge.

Control/mitigation: We look to maximise our treatment capacity by adopting a Throughput, Reliability, Availability and Maintainability (T-RAM) approach for our facilities. We also undertake a digester and tank clean programme, regular testing and analysis of sludge, and balance capacity and demand through the bioresources production planning team.

Assurance: Bioresources production planning team undertakes first line assurance against UK Biosolids Assurance Scheme (BAS) accreditation, and other codes of practice such as the safe sludge matrix which certifies our treatment. Second and third line assurance is also undertaken by the assurance and internal audit teams respectively.

10. Credit ratings

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

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

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

A. Erosion of pension scheme surplus

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

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

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

B. Financial outperformance

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

Control/mitigation: Interest rate and inflation management, ongoing monitoring of markets and regulatory developments, and sensitivity testing as part of our company business planning process relative to assumed periods of low inflation both in isolation and in conjunction with the realisation of severe but plausible risks.

Assurance: First line assurance is undertaken by the finance team as part of the company business planning process, with second line assurance undertaken at monthly executive level meetings. Further oversight is provided by the group board and treasury committee and third line assurance is provided through cyclical internal audit reviews.

C. Dam failure (TCFD)

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

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

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

D. Disease pandemic

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

Control/mitigation: We have a pandemic contingency plan which is regularly reviewed and was updated to reflect lessons learned from COVID-19. The plan includes multi-channel communication with non-pharmaceutical interventions.

Assurance: The assurance team undertakes second line assurance, with internal audit undertaking various reviews.

E. Terrorism

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

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

Assurance: Security measures are reviewed on a regular basis by our internal asset owners in conjunction with the central security team. Second line assurance is provided by the cross business security steering group. In addition, internal audit undertakes cyclical audits with external technical assurance being delivered by specialists.

TCFD

How we identify, assess and manage climate-related risks and opportunities.

Summary

- The company operates a mature risk and resilience framework for the identification, assessment and management of all risks.
- We have both physical and transitional climate risks in our corporate business risk profile, including seven of our most significant event-based risks, see pages 68 to 69.
- Climate change is fully integrated across our overall corporate risk management system with climate change identified as both a material issue (see page 30) and one of our most prominent causal themes of event-based risks.
- Our 2021 climate change adaptation report available on our website includes a comprehensive climate change risk assessment of both physical and transition risks and opportunities. The most material of these are presented on page 42 and it is clear how these risks are key drivers to our strategies and business planning.
- We published our 2022 Drought Plan.

Climate risk identification and assessment

We have a mature risk and resilience framework for the identification, assessment and management of risks that is described on pages 60 to 69. Following recognition of climate change as a material issue, a special review of all event-based risks in our business risk profile was carried out to ascertain which risks in our business risk profile are sensitive to climate change. The risks identified as most sensitive are outlined on the next page, along with our 2023 assessment of their current likelihood and impact. Long-term likelihood and impacts at 2050 and 2100 are also shown and are based on the Met Office climate projections using the most likely global emissions scenario known as RCP 6.0, in which emissions peak around 2080 and average temperatures will have risen to between 3 and 3.5°C by 2100.

Incorporating longer-term climate change impacts explicitly into our corporate risk framework has raised the profile of climate change. This enabled the board to consider our appetite and tolerance, choosing to mitigate and control the risks from within existing risk management processes and with the same thresholds for materiality.

We consider both physical risks that impact our operations, assets or resources, and transitional risks, and those associated with the transition to a low-carbon economy, such as evolving policies, regulation and legislation. We use a variety of approaches to assess risks such as PESTLE, to ensure complete coverage of external influencing factors, and complex and detailed models to use Met Office UK climate projections to understand the impacts on water resources and drainage and wastewater management.

In our quantification of the significance of different risks we also recognise that some risk events may happen multiple times so we compare impacts over a long-term (typically 40-year) horizon. This accentuates where interdependencies of climate change and other demographic changes influence the frequency of events as well as the consequences.

Managing climate-related risks

We have a clear understanding of the risks in the short and medium term but to help us manage uncertainties and ensure a low regrets approach, we are maturing our strengths in long-term and adaptive planning and considering the uncertainty associated with particularly complex issues including climate change, but also population growth, technology and abstraction reduction needs.

In preparing our latest climate change adaptation report, we assessed the organisation's resilience to physical outcomes of climate change, such as hotter, drier summers and more extreme weather events. Over 90 risks were noted that might impact a single business area, for instance wastewater, and we also identified business-wide risks, interdependencies and transitional risks. The most material of these physical and transitional climate risks are also presented in the table on page 42 to show how climate trends lead to business challenges and can result in consequences to customers or the environment. By recognising the causes and consequences, and assessing the likelihood and the severity of impact (both financial and reputational) should the event occur, we are able to prioritise climate-related risks and take proactive and early action to manage these risks and reduce the frequency and severity.

The actions being undertaken to manage these climate risks are described in the third climate change adaptation report. We are applying a Systems Thinking approach to provide great water for a stronger, greener and healthier North West. This means that interventions to address one risk have multiple benefits. For instance, sustainable drainage systems (SuDS) to slow down or divert rainwater runoff both reduce the risk of sewer flooding and optimise wastewater treatment capacity. Green infrastructure solutions such as SuDS provide an opportunity to deliver wider social value in the community and local environment.

Our public Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) are examples of where adaptive planning are used to shape our plans for the long term (25+ years) while staying aligned with our short-term needs. In these plans we describe how we have used complex models to test how resilient our services would be against a range of possible future climate change and demand scenarios (population growth and movement, economic trends and patterns of water use). Understanding these impacts allows us to adapt our plans to improve performance and resilience across key topic areas such as water supply, leakage, sewer flooding and pollution.

Integration of climate-related risks into our risk management framework

We are maturing our understanding of risk and uncertainty to build and maintain long-term resilience across the corporate, financial and operational structures of the group. Planning for the long term allows us to deliver further environmental and social value, for example, through prioritising sustainable drainage and monitoring impacts before investing in more traditional assets; or carrying out modelling and investigations to ensure we spend customers' money wisely as we look to create a stronger, greener and healthier North West.

Future focus

- Produce our PR24 business plan with full integration of carbon reduction and climate resilience priorities.
- Improve our long-term strategic plans for water resources and drainage, integrating advanced climate change analysis to shape our investment and operational approaches in the short, medium and long term.
- Learn more about the profile of risk events, their causes and consequences, and to identify opportunities to improve our capacity and capability.
- Further embed climate change impacts into corporate decision-making tools and processes.

Read our climate change adaptation report on our website at unitedutilities.com/corporate/responsibility/environment/climate-change/climate-change-adaptation

Our event-based risks most sensitive to climate change[2]

TCFD risk categories

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

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

(1) One of the top ten ranking event-based group risks (see pages 68 to 69).
(2) Global emissions scenario RCP 6.0.

Control effectiveness

Controls are the activities we undertake to reduce the long-term risk or realise the opportunity.

- Mostly sufficient
- Somewhat sufficient
- Largely insufficient to mitigate risk

Water sufficiency event[1]

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

Controls (Somewhat sufficient)

Reduce leakage.

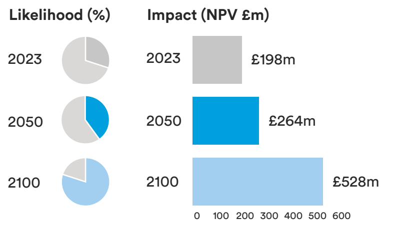
Support customers to use less water.

Install more meters in domestic properties.

Develop new sources of water, particularly boreholes.

Long-term water resources management planning.

Facilitate water trading between the North West and other regions of the UK.



Failure of wastewater network[1]

More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding or storm overflow activations. Urbanisation makes this worse due to quick runoff from hard surfaces.

Controls (Largely insufficient to mitigate risk)

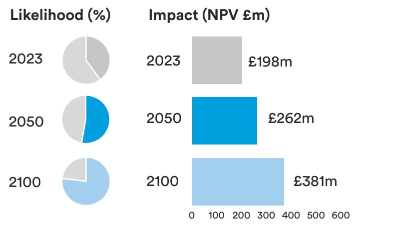
Increase combined sewer capacity and build stormwater holding tanks.

Implement and encourage 'slow the flow' and sustainable drainage solutions.

Support customers to use sewers responsibly.

Use technology to monitor and better control flows in the sewer system.

Install flood protection devices to at-risk properties.



Land management[1]

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

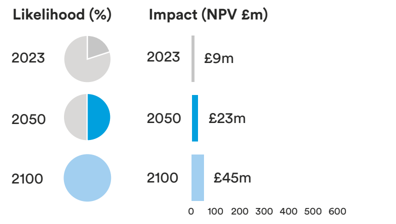
Controls (Somewhat sufficient)

'Catchment Systems Thinking' and proactive land management, including nature-based solutions.

Deliver net gain in biodiversity from our construction projects.

Directly restore peatland and woodland.

Work in partnership with farmers, regulators and others to improve upland watercourses.



Failure to adequately treat wastewater

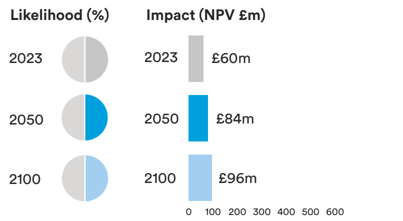
Extremely heavy rainfall, which is projected to happen more often, can exceed our wastewater treatment works capacity and result in activations of overflows to prevent flooding of assets, streets and homes.

Controls (Somewhat sufficient)

Investment to meet legislated environment and treatment capacity requirements.

Inclusion of climate change growth parameters in long-term adaptive plans.

Controls for failure of wastewater network will support this risk.



Failure of above-ground water and wastewater assets (flooding)

Operational sites can be flooded from sea, river or surface water sources. Climate change is expected to increase the likelihood of flooding due to average winter rainfall being projected to rise, frequent storm events and rising sea levels.

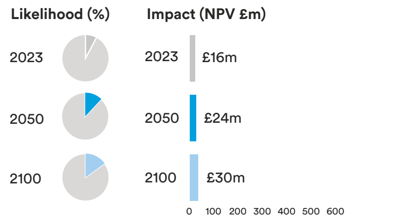
Controls (Somewhat sufficient)

Install permanent flood defences at most flood-prone sites.

Improve flood forecasting capabilities.

Build better network connectivity to maintain water supplies during floods.

Invest for quick after-flood recovery.



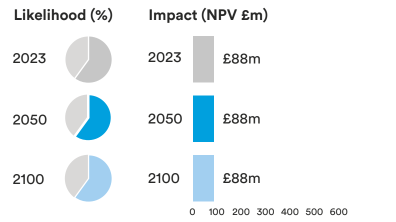
Recycling of biosolids to agriculture[1]

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

Controls (Somewhat sufficient)

Additional storage capacity.

Contingency planning for alternative methods for sludge disposal, e.g. incineration.



Risks and opportunities

TNFD How we identify, assess and manage nature-related risks and opportunities.

Many key risks in our risk management assessments are linked to the natural environment, including many of our principal risks and significant event-based risks.

We recognise that impacts and dependencies on nature are often location-specific and are inextricably linked to the local environment and communities.

The risk breakdown structure that underpins our operational risk assessment framework includes consequences related to biodiversity, flooding, drought, water quality, recreational access, carbon storage, air quality and waste. This includes a process to make decisions that avoid, minimise or mitigate nature-related risks. Prioritisation of risks is determined based on current risk exposure (calculated based on likelihood of occurrence and most likely impact) of each of the principal risks relative to each other. Decisions are made on the level of risk we are prepared to manage relative to risk appetite and tolerance in order to deliver on our strategy.

There is a close link between nature and climate change, with many pressures on the natural environment becoming more acute as the climate changes. Our climate change adaptation report highlights key physical risks related to the natural environment. Two of our carbon pledges – woodland creation and peatland restoration – are intrinsically linked to the natural environment and will deliver nature-related benefits beyond their value as natural carbon sinks.

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

Links to principal risks

- Water service
- Wastewater service
- Health, safety and environmental

Links to event-based risks

- Price Review 2024 outcome
- Wastewater network failure (sewer flooding)
- Water sufficiency
- Recycling of biosolids to agriculture

Read our **joint discussion document with The Rivers Trust on nature-based solutions** at **unitedutilities.com/globalassets/documents/pdf/pr24---unlocking-nature-based-solutions-to-deliver-greater-value.pdf**

OTHER How we identify, assess and manage other risks and opportunities of material interest.

Cyber security

Security is one of our ten principal risks, including cyber security, and cyber is identified as one of our most significant event-based risks. We have a low risk appetite in this area, and to date have not experienced a material breach in our IT security. We undertake number of mitigating actions, including:

- Enhanced physical security measures to counter general criminality and potential terrorism as appropriate.
- We monitor and review alerts and guidance issued by the National Cyber Security Centre and the US Cybersecurity and Infrastructure Security Agency, and implement new security technologies where needed to address growing threats, such as upgrades to our firewalls and multi-factor authentication to access our systems.
- We have a structured security policy framework including detailed guidance to allow all users, administrators and moderators to operate within a clearly communicated, best practice ruleset. Internal audits are regularly carried out to ensure compliance is maintained.
- Colleague training, including mandatory 'Security Seven' training, cyber incident training, and enhanced training for incident first responders. We also improve colleague awareness with regular cyber incident response exercises, phishing tests and associated phishing training, as well as running regular cyber-related events.
- Our Cyber Security Incident Response Plan is incorporated into business continuity and incident management plans and processes, and we have a dedicated business-wide Cyber Security Incident Response Team.
- Strong, independent assurance, including a continuous annual schedule of penetration testing, red team exercises for both physical and cyber and regulatory audits against our operational assets, and independent assurance and guidance against our regulatory security commitments as part of our annual security assessments. We have a comprehensive supply chain security assurance process, and work with suppliers to help them reach the required security level where needed.

Financial risk management

Finance is one of our ten principal risks and credit ratings and financial outperformance are identified as event-based risks. The controls we have in place through our financial risk management policies and processes provide a high degree of mitigation and protection from market volatility, enabling us to raise finance across the economic cycle. Our debt has a long average life and maturities are spread to avoid a high concentration of risk in any one year. We monitor financial ratios regularly as well as considering the impact on these metrics within our business planning processes.

Read more on pages 265 to 272

Affordability and vulnerability

Retail and commercial is one of our ten principal risks, and this incorporates a number of underpinning event-based risks. These include customer experience, cash collection, billing accuracy, and affordability support, which collectively take account of economic conditions including cost of living pressures, providing value for money, and supporting our most vulnerable customers. In order to achieve high levels of performance, our customer experience and debt strategy includes multiple controls, including:

- Customer consultation (requirements and expectations);
- Customer surveys;
- Affordability schemes;
- Tariff setting policies; and
- Reconciliation processes.

Health, safety and wellbeing

Health, safety and wellbeing is part of one of our ten principal risks: health, safety and environmental. We have an adverse appetite and tolerance in this area.

We have identified six factors critical to our success:

- Active leadership;
- Engaged, empowered colleagues;
- Clear expectations;
- Safe, healthy working environments;
- Simple effective systems; and
- Continuous improvement.

We work relentlessly to ensure our health, safety and wellbeing culture is built upon these six key principles.

Responsible supply chain

Supply chain and programme delivery is one of our ten principal risks, and we have a prudent risk appetite and tolerance in this area. We are committed to working with suppliers that share our values. As part of our United Supply Chain approach, our Responsible Sourcing Principles are structured around ESG issues that are important to us as a business and in our approach to responsible sourcing. We assess sustainability risk on partner and strategic suppliers against our Responsible Sourcing Principles to target our enhanced due diligence audits and to focus on opportunities for improved performance in tackling key issues such as modern slavery and human trafficking.

Equity, diversity and inclusion

Equity, diversity and inclusion is not directly identified as a key risk, but having a diverse and inclusive workforce is important to ensure we have access to a wide range of ideas and views and to maximise colleague engagement, which has an impact on resource risk – one of our top ten principal risks. We are dedicated to continuing to improve in this area.

New and emerging risks and opportunities

We define new risks as those which have not previously been apparent and are expected to have long-term implications for the group and/or sector. We consider emerging risks to be those which are growing, developing, becoming more apparent or prominent. The emerging status of a risk can therefore relate to either newly established or existing risks.

Horizon scanning activity is a key feature of the risk and resilience framework. It is undertaken routinely as part of external research and benchmarking, the assessment of event-based risks, and through dedicated forums such as the new and emerging risk forum and the compliance working group.

Where there are high levels of uncertainty, or the circumstances are too complex to quantify, we classify and retain new and emerging risks as watching briefs. Where there is more understanding, assumptions can be applied to the assessment of causal factors (drivers/influencers), consequences (immediate, knock-on and cascading outcomes), and control effectiveness (strengths, weaknesses or gaps) which will be reflected in the quantification of the likelihood and/or impact.

Recent assessments of new and emerging risks can be categorised into three areas, notably economic conditions, security and legislative/regulatory change.

Economic conditions: continue to be a challenge due to high inflation and scarcity of critical resources.

- **National scarcity of resource:** The AMP8 capital programme is expected to be significantly larger than in AMP7 across the whole water sector, which, compounded by investment programmes in other industries (i.e. nuclear and rail), may result in high levels of competition for resources with implications to delivery.
- **Price volatility:** Although there has been stabilisation over the last 12 months, inflationary pressure over multiple commodities continues to be a factor with energy the most volatile.
- **Security of the supply chain:** In addition to the increase in competition for resource and geo-political tensions, scarcity of some critical goods and services in the supply chain continues to be a challenge.
- **Supplier viability:** The medium and long-term sustainability of suppliers is an emerging risk due to ongoing inflationary pressures combined with increasing scarcity across the supply chain.
- **Credit rating:** While underlying credit quality is not a concern, the impact of high inflation on finance expense results in the potential for credit agency thresholds to be breached when combined with other factors such as additional investment spend to meet environmental and service improvements over and above price review allowances.
- **Cash collection:** Inflationary pressure is having a significant impact on the cost of living, which may affect customers' ability to pay bills.

Geopolitical: in addition to influencing economic conditions, geopolitic tensions continue to have an emerging effect on the security of critical national infrastructure and energy resilience.

- **Cyber:** The rising tensions between Russia and the West have been reflected in the quantification of the cyber risk. As a result, increased security measures have been applied which include security operations teams on extended high alert and the rapid deployment of technical blocking of critical indicators of compromise.
- **Energy resilience:** There is an increasing external threat of planned and unplanned outages, and voltage quality from national grid that could affect technological and operational assets.

Legislative/regulatory change: Increased public and political interest in the water sector and changes to societal expectations is leading to a number of developments.

- **Storm overflow activations:** Overflow activations are subject to the environmental permitting regime, however we understand and share the increased public and political interest in water quality and the focus on the impact of activations. We are therefore committed to addressing the situation and have already reduced overflows over the last two years. We are initially tackling those assets with the highest frequency of activations, and have received draft approval from Ofwat to accelerate funding to deliver further improvements faster. We have also introduced new river rangers to help with these important improvements and we are in the final stages of planning for further significant activation reductions in AMP8. However, the scale and complexity of changing the design, configuration and operation of process and network assets is significant and will pose new and emerging risks in their own right.
- **Pollution risks:** In April 2023, Defra issued a consultation with regards to variable monetarised penalties which includes a potential significant increase in the penalty cap.
- **Recycling of biosolids to land:** A total ban on recycling biosolids to agricultural land already exists in some European countries. Adoption of this approach by the UK Government would result in significant change of assets and operations.
- **Plastics and forever chemicals:** There is increased attention on single-use plastic, microplastic (plastics less than 5mm) and perfluoroalkyl and polyfluoroalkyl substances (PFAS) commonly known as 'forever chemicals', with their presence in the environment being linked to the water cycle.

Material litigation

The group robustly defends litigation where appropriate and seeks to minimise its exposure by establishing provisions and seeking recovery wherever possible. Litigation of a material nature is regularly reported to the group board. While our directors remain of the opinion that the likelihood of a material adverse impact on the group's financial position is remote, based on the facts currently known to us and the provisions in our financial statements, the following three cases are worthy of note:

- In relation to the Manchester Ship Canal Company matter reported in previous years, a hearing was held in the Court of Appeal in 2022 and the main additional points raised by MSCC were dismissed, although MSCC were granted leave to appeal to the Supreme Court. The final appeal was heard in early March 2023 and the Court's decision is awaited. This may provide further clarity in relation to the rights and remedies afforded to the parties and others in relation to discharges by water companies into the canal and other watercourses.
- As reported in previous years, in February 2009, United Utilities International Limited (UUIL) was served with notice of a multiparty 'class action' in Argentina related to the issuance and payment default of a US$230 million bond by Inversora Eléctrica de Buenos Aires S.A. (IEBA), an Argentine project company set up to purchase one of the Argentine electricity distribution networks which was privatised in 1997. UUIL had a 45 per cent shareholding in IEBA which it sold in 2005. The claim is for a non-quantified amount of unspecified damages and purports to be pursued on behalf of unidentified consumer bondholders in IEBA. The Argentine Court has recently scheduled various hearings to receive the testimony of fact witnesses and experts (starting in May).UUIL will vigorously resist the proceedings given the robust defences that UUIL has been advised that it has on procedural and substantive grounds.
- A Letter Before Action was received by UUW in February 2023 in respect of potential collective proceedings before the Competition Appeal Tribunal. We are informed that the Proposed Class Representative (PCR) is intending to bring a claim on behalf of a class comprising consumers of UUW (on an opt-out basis) who have allegedly been overcharged for sewerage services as a result of an alleged abuse of a dominant position. We have been informed that the PCR also intends to bring the claim against United Utilities Group PLC, as the ultimate parent company of UUW. Proceedings have not yet been issued.

Metrics and targets

In this section you will find:

How we create value for our stakeholders in the short and long term.

How we create value more widely, including contributing to the UN SDGs.

How we measure the value that we create, including climate and nature-related metrics.

Some key short, medium and long-term sustainability-related targets.

How we create value for customers

Short term

- We focus on providing continuous, resilient and reliable water and wastewater services for customers, ensuring clean water is available at their taps when they need it, and wastewater is taken away when it goes down their drains.
- When customers need to contact us, we are helpful, friendly and supportive, talking and listening to them so that we can understand and meet their expectations.
- We maintain bills that are good value for money, providing help and support for those who are struggling to pay.

Long term

- Our water and wastewater services make a major contribution to the long-term health and wellbeing of customers in the North West.
- Through long-term financing and the regulatory framework, we are delivering multi-million pound infrastructure projects to improve services and resilience for the long term. We ensure the cost of this is shared fairly and affordably between those that benefit now and in the future.
- Providing additional help to vulnerable customers builds long-term trust.

How we create value for the environment

Short term

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

Long term

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

How we create value for colleagues

Short term

- We have a strong focus on health, safety and wellbeing and aim to ensure all colleagues go home safe and well at the end of the day.
- We invest in training and development to enable our colleagues to grow their skills and to keep them motivated.
- Listening to our colleagues helps to create an engaged workforce, increasing job satisfaction, and through colleague communications and conferences we update our people on business developments so they feel part of a team.

Long term

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

How we create value for our stakeholders

How we create value for communities

Short term

- We look after beautiful rural landscapes and pockets of urban green space, and open much of our land to the public, supporting regional tourism and offering communities health and wellbeing benefits through access to relaxation and recreation.
- Working in partnership with others means we can accomplish more in tackling mutual issues, such as partnering to engage people with nature and river improvements.
- Our operations and projects are often near homes and businesses, and we engage with these communities to build understanding and trust.

Long term

- Our graduate and apprentice programmes ensure we have a diverse and skilled talent pipeline providing opportunities across the region.
- Managing land responsibly means we leave the North West environment in a better condition for future generations.
- We work with teachers and children to raise awareness about water and the natural environment, giving the next generation an understanding of the true value water brings and how we can all play our part in protecting the services nature provides.

How we create value for suppliers

Short term

- We spend significant amounts of money with our suppliers each year to help deliver maintenance and enhancement projects across our asset base, and this helps support thousands of jobs in our region.
- Paying suppliers on time gives them confidence in us and allows companies to maintain cash flow and become more resilient.
- While our operations and suppliers are mainly UK and European, they work closely with us to address human rights, in particular modern slavery.

Long term

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

How we create value for investors

Short term

- Since many of our investors are pension funds, charities and colleagues, the income we provide through dividends benefits millions of people every year.
- We are committed to high ethical standards of business conduct, strong corporate governance and doing the right thing so investors can have confidence in the way we do business.
- We maintain a high level of quality and transparency in what we report.
- Our focus on innovation drives continuous improvements, enabling us to be at the frontier of our industry.

Long term

- The majority of shares in our company are typically held for the long term, and we provide an appropriate return to investors through a combination of short-term dividend income and long-term growth.
- We plan far into the future and invest in our infrastructure to ensure sustainability.
- We manage risk prudently so investors can have confidence in our stability and resilience in the round.
- We link investor returns to our environmental and social projects through our sustainable finance framework.

How we create value more widely

As well as the direct value we create for our stakeholders and for the North West, our activities create wider value and contribute towards common goals.

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

Our approach to responsible business aligns quite naturally with the goals and we have identified nine that are most material to our business and where we contribute the most. We contribute to the delivery of a wider selection of the SDGs through our investment projects and these are described in our sustainable finance framework.

Working with SMEs and start ups

Our Innovation Lab process creates a unique opportunity for small and medium-sized enterprises (SMEs) and start ups, who we would otherwise not have worked with, to develop and test their products and ideas in a live customer environment.

Contributing to public finances

We paid total taxes of £229 million this year, including business rates, employment taxes, environmental taxes, and other regulatory service fees such as water abstraction charges. These help to fund essential public services across the country.

Dividend income for a diverse investor base

We have a number of pension funds and charities among our shareholders, as well as a high proportion of retail shareholders and many of our colleagues holding shares under our share scheme, meaning the dividends we pay are relied on by millions of people.

Charitable activities

Over the past 12 months our colleagues have raised £52,818 for our company charity, Macmillan Cancer Support.

We support and encourage colleagues by providing up to three days' paid volunteer leave per year, matching individual colleague fundraising efforts to any UK-registered charity up to £200 per person per year, and covering the admin fees of payroll giving, or 'Give As You Earn'.

Bringing people together

We have undertaken a number of initiatives that bring people together across a variety of organisations and different industries to share ideas and best practice and drive improvements that go wider than our region and our customer base, like our summits for affordability and for diversity and inclusion, and the Hardship Hub which enables debt advisers to help more people and find cross-industry help more quickly all in one accessible place.

Mitigating climate change

We are committed to playing our part in securing the global goal to curb climate change to no more than 1.5°C, and we set out on pages 45 to 47 our transition plan to reach net zero by 2050, including our six carbon pledges underpinned by ambitious science-based targets.

6 Clean water and sanitation

Part of our purpose is to provide great water. This is the reason we exist, ensuring customers in the North West have safe, resilient and affordable water and wastewater services.

This includes avoiding wasting water, and we promote water efficiency through campaigns, advice, education and free water saving gadgets for customers.

We protect and enhance water-related ecosystems across our region through initiatives such as our Catchment Systems Thinking approach.

Links to material issues:

- Customer service and operational performance
- Drinking water quality
- Storm overflows

SUSTAINABLE DEVELOPMENT GOALS

Read our **sustainable finance framework** on our website at **unitedutilities.com/globalassets/z_corporate-site/investor-pdfs/sustainable-finance-framework-2020-final.pdf**

8 Decent work and economic growth

We are a significant contributor to the North West economy. Our daily operations provide direct, indirect and induced employment for 22,700 people. We provide training and development opportunities in safe, secure working environments, graduate and apprentice opportunities, programmes for young people experiencing difficulties securing employment, offer equal opportunities to all, and value diversity among our colleagues.

Links to material issues:

- Affordability and vulnerability
- Health, safety and wellbeing
- Diverse and skilled workforce

9 Industry, innovation and infrastructure

We invest heavily in infrastructure, including plans for over £4 billion between 2020 and 2025 to improve the performance and resilience of our assets and operations to impacts such as those arising from climate change.

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

Links to material issues:

- Resilience
- Innovation
- North West regional economy

11 Sustainable cities and communities

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

Links to material issues:

- Customer service and operational performance
- Resilience
- Supporting communities

12 Responsible consumption and production

We are committed to sustainably managing natural resources, including reducing leakage and encouraging and supporting customers to reduce water consumption. We generate renewable energy and high quality fertiliser from bioresources, and 98 per cent of our waste goes to beneficial use.

Links to material issues:

- Resilience
- Climate change
- Water resources and leakage

13 Climate action

Responding to the climate emergency is an imperative for us all and building a greener North West is a key ambition of our purpose and one of our strategic priorities. Delivering against our carbon pledges and science-based targets, while ensuring that our activities and the North West region are resilient to the impacts that a changing climate might bring, is key to our long-term planning.

Links to material issues:

- Climate change
- Resilience
- Responsible supply chain

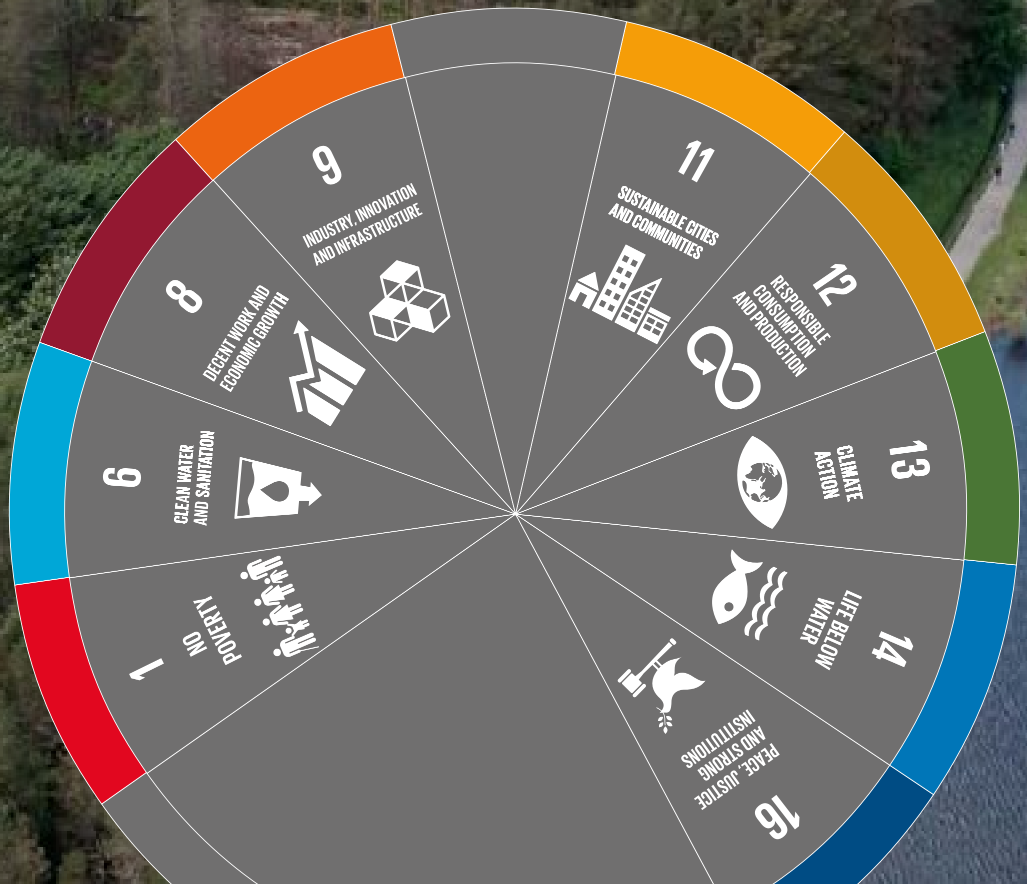
1 No poverty

The North West contains more areas of extreme deprivation than any other region in England.

We have a sector-leading package of affordability support, and have helped over 330,000 households so far in the last three years. We are also strong supporters of the Consumer Council for Water's drive to implement a national social tariff.

Links to material issues:

- Affordability and vulnerability
- North West regional economy
- Customer service and operational performance



14 Life below water

We are sector leaders in minimising pollution, look after 29 bathing waters in the North West, and have made good progress, with significant further ambitions, on improving river water quality, which has a knock-on impact on our oceans. This includes reducing storm overflow activations and addressing nutrient imbalance.

Links to material issues:

- Storm overflows
- Natural capital and biodiversity
- Environmental impacts

16 Peace, justice and strong institutions

We run our business in a responsible manner, and doing the right thing is one of our core values.

We maintain high standards in corporate governance and ethical standards of business conduct – those systems and processes through which our organisation is managed, controlled and held accountable. We are committed to open, honest and transparent corporate reporting.

Links to material issues:

- Trust, transparency and legitimacy
- Political and regulatory environment
- Corporate governance and business conduct

Return on Regulated Equity (RoRE)

Return on regulatory equity (RoRE) relates to our regulated entity, United Utilities Water Limited, and measures the regulatory returns (after tax and interest) that companies have earned by reference to the notional regulated equity (which is calculated as 40 per cent of the regulatory capital value (RCV), while the other 60 per cent of the RCV is notional net debt).

RoRE comprises a base allowed return, which is set by Ofwat, plus or minus any out or under performance earned. It is reported on an annual and cumulative basis throughout each asset management period (AMP).

As well as being a key regulatory measure, RoRE is one of our financial KPIs and executive remuneration is linked to our RoRE performance through its inclusion in the Long Term Plan.

The three key areas through which we can earn a higher RoRE are:

- delivering efficiency savings versus our cost allowance (total expenditure (totex) outperformance);
- earning outperformance payments for service delivery against our performance commitments (customer outcome delivery incentive (ODI) rewards); and
- raising finance at a lower cost than the industry allowed cost of debt (financing outperformance).

The main areas that could detract from RoRE, therefore, are:

- overspending versus our total cost allowance (totex underperformance);
- incurring underperformance payments for failure to meet our performance commitments (customer ODI penalties); and
- incurring higher finance costs than the industry allowed cost of debt (financing underperformance).

RoRE can also be higher or lower as a result of the outturn tax position versus the allowance.

Our efficient financing has given us a history of financing outperformance. We strive to deliver efficient costs, but our strategy for AMP7 has been to prioritise operating performance and ODI rewards over totex savings, as this drives better long-term value for all our stakeholders.

KPIs and other stakeholder metrics

Our key performance indicators

We measure our performance against a selection of key performance indicators (KPIs), both operational and financial. Bonuses (for executive directors and colleagues right through the business) and long-term incentives for executive directors, are closely aligned to many of our operational and financial KPIs.

Operational KPIs

We have redefined our operational KPIs this year to align with our purpose and strategic priorities, and in doing so this also provides alignment with environmental, social and governance (ESG) matters. More detail on these can be seen on pages 10 to 11.

Financial KPIs

We have selected financial KPIs that assess both profitability and financial sustainability, including income statement, balance sheet, and shareholder performance metrics. We have made one amendment to our financial KPIs this year, exchanging low dependency pension schemes (which we have already fully satisfied) with return on regulated equity (RoRE). More detail on these can be seen on pages 12 to 13.

Our other performance indicators

Our KPIs are by no means the only measures by which we monitor and assess our performance. We report against many other metrics both internally and externally. As discussed on pages 56 and 57, our stakeholder engagement gives us a view of what matters most to them. We report on a selection of material ESG measures on pages 84 to 109 based on the issues shown to be of highest interest to our stakeholders, including climate and nature-related metrics. These measures relate to the group unless stated otherwise in the performance tables where they relate to the regulated entity, United Utilities Water Limited. We regularly report on numerous ESG performance measures on our website at unitedutilities.com/corporate/responsibility/our-approach

Assurance of performance metrics

All these performance indicators have received an appropriate level of assurance, such as independent third-party verification, regulatory reporting assurance processes, or through our own internal audit team. The performance tables on pages 85 to 109 state what level of assurance has been obtained for each metric, and the sections of this report that have received external assurance are marked as such on the relevant pages, including the figures in our energy and carbon report and our remuneration report. These audit opinions can be found on our website at unitedutilities.com/corporate/responsibility/our-approach/esg-performance

Our annual performance report (APR)

Performance against our regulatory contract is monitored and assessed each year, and reported within the annual performance report (APR), as required by our economic regulator Ofwat. We include several regulatory performance measures within this report. Our APR provides more details, as well as further narrative, about our regulatory performance during the year.

There is financial information contained within the APR. This relates only to the regulated company, United Utilities Water Limited, and its appointed activities, and is calculated in accordance with the regulatory accounting framework. This differs from IFRS reporting, and a reconciliation to IFRS reporting is provided in the APR. For the purposes of clarification, our financial KPIs relate to performance at the group level, and are calculated within the definitions given in this report. Our previous year APRs are available on our website, and the APR for 2022/23 will be published in July 2023.

Our **annual performance report (APR)** will be available on our website from 15 July at unitedutilities.com/corporate/about-us/performance/annual-performance-report

TCFD Climate-related metrics and targets used to assess and manage climate-related risks and opportunities

Summary

- United Utilities was the first UK water company to have targets verified by the SBTi, including for scope 3 emissions. We have now achieved SBT 2 as 100 per cent of our annual electricity purchased is from renewable sources.
- We have made progress on SBT 1 reducing absolute scope 1 and 2 emissions by 3.6 per cent (gross) compared to our baseline year 2019/20 and SBT 3 where 23 per cent of our suppliers of capital goods (by emissions) have set their own science-based target.
- UK Government carbon values (BEIS) are used in our risk assessments and our planning for medium and long-term investments, including PR24.

Metrics to assess climate-related risks

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

Performance metrics: climate-related risk management

We manage our climate-related risks by putting in place controls such as those as set out on page 71 and in Appendix A.3 of the 2021 climate change adaptation report, published on our corporate website. The effectiveness of these controls is seen in our operational performance metrics. The following metrics are recognised as examples of those key to our resilience to a changing climate and are reported in the annual performance report:

- Leakage;
- Per capita consumption;
- Flooding incidents, risk and resilience;
- Storm overflow activations;
- Risk of severe restrictions in a drought;
- Sewer collapses;
- Water service supply and resilience; and
- Low water pressure areas.

Note that, as a regulated business, climate-related opportunities are limited to ways we can avoid costs, rather than generate revenue.

Performance metrics: Science-based targets

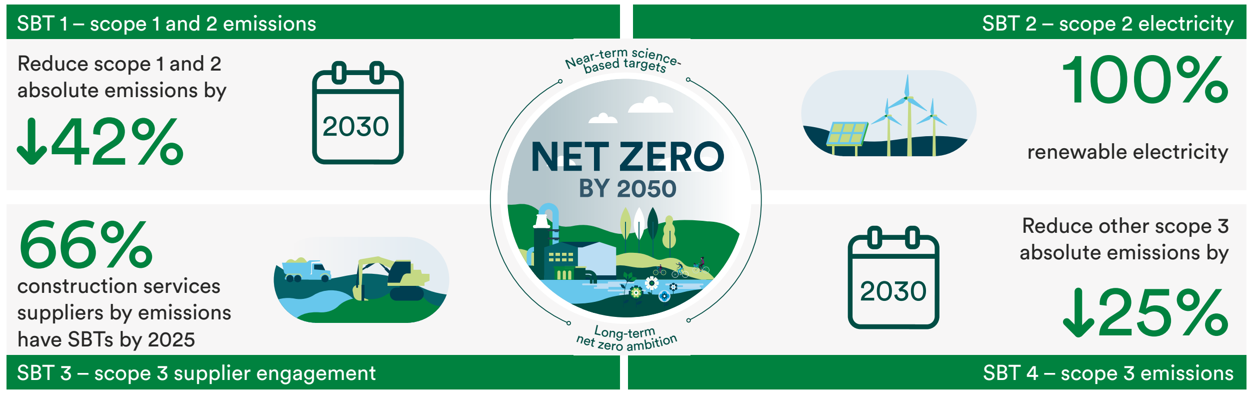
We have a strong track record of playing our part to mitigate climate change and have reduced scope 1 and 2 emissions by over 70 per cent since 2005/06, largely through our substantial investment in renewable power generation and green energy procurement. Our ambition and commitments are based on international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

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

Future focus

- Continue our collaboration with suppliers so that we can increase the proportion of our scope 3 emissions that are estimated using volume of product purchased rather than spend.
- Attempt to inform national approach to water investment programmes arising from public pressure and the new Environment Act 2021.
- Work to validate our long-term net zero ambition to the new SBTi Net Zero Standard.

Read about **progress to deliver our six carbon pledges** on page 92
Read our **streamlined energy and carbon report including 2022/23 greenhouse gas emissions** on pages 93 to 95
Read more about our **2022/23 environmental performance** on page 89



Metrics and targets

TNFD Nature-related metrics and targets

Managing nature-related risks and opportunities

Nature is fundamental to the sustainability of our business and so we monitor a wide variety of metrics and set targets to help monitor and assess nature-related risks and opportunities.

To measure our performance we demonstrate delivery against contributing targets from a number of statutory requirements, such as the condition of protected sites, biodiversity net gain, environmental performance, and supporting strategies. We were the only water company to set a natural capital outcome delivery incentive in our business plan for 2020–25. This is measured by demonstrating additional value created through ecosystem services for customers and the environment. We achieve this by implementing nature-based solutions where they offer best value compared against a hard-engineered solution.

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

Many of our targets in the short and medium term are regulatory performance commitments for 2020–25. We also have targets that go further, like our Better Rivers pledges and targets for monitoring and reducing storm overflow activations. We are in the process of preparing our business plan with targets for the 2025–30 period. Our long-term targets align with government expectations, such as achieving 75 per cent favourable condition for SSSI locations by 2042. We are committed to improving surface, groundwater and bathing water quality in the immediate term and beyond.

Progress this year

- Updated our corporate natural capital account so we can track and measure trends in our impact on nature.
- Developed our long-term environmental strategy.

Future focus

- Continue to engage with the Task Force to develop our nature-related disclosures, and work towards the global shared vision of 'living in harmony with nature by 2050'.
- Develop a strategy on how we will achieve the four 2030 biodiversity goals adopted by nations during COP15. By engaging in the TNFD process early we are already working towards achieving Target 15 to disclose on our interactions with nature.

OTHER Metrics and targets in relation to areas of material interest

Cyber security

We monitor a number of security metrics and have targets against each. Many are aimed at meeting or exceeding national recommendations or comparative performance, such as targets for security patching recommended by the National Cyber Security Centre, and our phishing test platform where we monitor comparative performance on clicks, compromises and reports. We target zero malware outbreaks and use a series of technical and process controls to ensure we achieve this. We aim to have all our major suppliers security assured to our standards, and maintain a dynamic and live assessment of our supply chain. We are measured annually by our regulators against NIS security targets and have remained compliant since this was introduced. As a tier two PCI-DSS merchant, we are measured annually by our payment industry stakeholder against PCI-DSS and have remained compliant to requirements for many years.

Financial risk management

We operate within targets set out in our financial risk management policies, including a range for how many months' liquidity we maintain on a rolling basis, levels of index-linked and fixed rate debt we want to maintain, and energy price hedging. We set individual credit risk targets for counterparties based on their level of risk. We target a 55 to 65 per cent gearing range, which supports our credit rating targets. Performance against all of these targets is monitored on a monthly basis.

Affordability and vulnerability

We monitor various metrics around cash collection, bad debt, and the number of customers on our support schemes. Our C-MeX score for customer satisfaction is impacted in part by the help we provide to customers in vulnerable situations. We have 2025 performance commitments for lifting customers out of water poverty and signing more customers up to Priority Services. Read more on pages 98 to 101.

Health, safety and wellbeing

We monitor various metrics for health, safety and wellbeing, including accidents and near misses. We have targets for accident frequency rates for both colleagues and contractors, and we target maintaining accreditation with the Workplace Wellbeing Charter. Read more on pages 100 to 101.

United Supply Chain

We aim to have 100 per cent of targeted suppliers signed up to United Supply Chain by 2025. Read more on page 108.

Equity, diversity and inclusion

We monitor a number of metrics on the inclusive nature of our workforce, including gender, ethnicity, disability, and LGBT+. We target scoring at least in line with both the UK norm and the Utilities norm on the diversity and inclusion questions in our colleague engagement survey, and we seek to make progress towards improving our diversity statistics, including closing the gender pay gap. Read more on pages 54 to 55.

Future targets

This page sets out some of the climate-related, nature-related and other sustainability targets we have set ourselves over the short, medium and long term.

Short term | Medium term | Long term

- TNFD 2023 – Monitor all storm overflows and make real-time data on their operation available to the general public
- TNFD 2025 – Improve water quality in 1,315 kilometres of rivers across the North West
- OTHER 2025 – 100 per cent of targeted suppliers signed up to United Supply Chain
- TCFD 2028 – 100 per cent green fleet
- TCFD 2025+ – Work to enable future national water trading
- OTHER 2025 – >220,000 customers registered for our Priority Services scheme
- TCFD 2030 – Reduce scope 1 & 2 greenhouse gas (GHG) emissions by 42 per cent and scope 3 GHG emissions by 25 per cent
- TCFD 2030 – Restore 1,000 hectares of peatland and create 550 hectares of woodland
- TNFD 2035 – Deliver our service using natural capital in a sustainable, efficient and resilient way
- TNFD 2050 – Help reduce water demand to 110 litres per person per day
- TCFD 2050 – Net zero GHG emissions aligned to the Paris Agreement's ambition to limit global warming to 1.5°C
- OTHER 2045 – Install additional water meters to achieve coverage of around 75 per cent of households
- TNFD 2050 – Reduce leakage by 50 per cent
- TNFD 2050 – Reduce to an average of no more than 10 activations per storm overflow
- OTHER 2070 – Eliminate lead pipes

Our environmental performance in 2022/23

How we measure performance

Our key performance indicators for building a greener North West are achievement of our Better Rivers commitments, our carbon pledges relating to renewable energy, green fleet, peatland restoration and woodland creation, and the Environment Agency's Environmental Performance Assessment. We report on a selection of other environmental metrics of interest to stakeholders on page 89.

GREENER

E Protecting and enhancing the environment

Strategic priorities

- Create a greener future
- Improve our rivers

Contributing to

Overview

The North West has a diverse mix of densely populated and built-up urban areas as well as many rural areas of outstanding natural beauty, and there are different environmental considerations needed for each. We will continue to protect and enhance the environment across our region, and manage our land responsibly to preserve and improve it for future generations.

We delivered a number of environmental improvements over AMP6, our current AMP7 programme is driving this even further, and in October we will submit our business plan for AMP8 with the largest environmental improvement programme we have ever delivered.

Our performance this year has remained strong. We are a sector leader at minimising pollution, have achieved our lowest ever level of leakage despite difficult weather conditions over the winter, and we are making good progress against our carbon pledges. We recognise a step change is needed when it comes to storm overflows. We have already delivered a 39 per cent reduction in reported activations of storm overflows since 2020, helping to improve river health across the region, and have ambitious plans to go further and faster.

Better Rivers: Better North West commitments achieved

Definition
The percentage of 2022/23 milestones delivered as part of our Better Rivers programme.

Target
95% of programme milestones delivered by 2025

Annual performance

100%
of 2022/23 commitments

All of this year's milestones have been delivered including hosting our first Environmental AGM, publishing our Better Rivers report and undertaking our first citizen science event at Windermere.

2021/22: new measure
2020/21: new measure

Status
Met expectation/target

Link to stakeholder

Link to material issues
- Storm overflows
- Political and regulatory environment
- Trust, transparency and legitimacy

Link to risks
- Wastewater service
- Political and regulatory

Link to remuneration
Bonus

Assurance
Independent third-party verification

Carbon pledges

Definition
Progress against our green fleet, peatland restoration and woodland creation pledges, and supplier engagement in relation to setting science-based targets.

Target
Individual carbon pledge targets set out on page 92

Annual performance

Good progress

We have plans for 200 electric vehicles in the next 18 months, are more than halfway to our 2030 peatland target, and are making good progress on woodland creation. We are working with construction partners, with 23 per cent having set science-based targets.

2021/22: Pledge 2 met
2020/21: Pledge 6 met

Status
Met expectation/target

Link to stakeholder

Link to material issues
- Climate change
- Resilience
- Trust, transparency and legitimacy

Link to risks
- Supply chain and programme delivery

Link to remuneration
LTP

Assurance
Independent third-party verification

EA's Environmental Performance Assessment (EPA) rating[1]

Definition
The Environment Agency's annual assessment across six key sector environmental performance measures.

Target
Upper quartile performance within the water industry each year

Annual performance

Top 4* rating

The most recent assessment is for 2021, when we were awarded the maximum four stars for the second year running, meaning we were classed by the Environment Agency as an industry-leading company. The EA will publish its annual assessment for 2022 in July 2023.

2021: Joint first
2020: Joint first

Status
Met expectation/target

Link to stakeholder

Link to material issues
- Customer service and operational performance
- Trust, transparency and legitimacy
- Political and regulatory environment

Link to risks
- Wastewater service
- Political and regulatory

Link to remuneration
LTP

Link to assurance
Independent third-party verification

Status key

Annual performance
- Met expectation/target
- Close to meeting expectation/target
- Behind expectation/target

(1) Measure relates to United Utilities Water Limited.

Read more about our approach to materiality on pages 28 to 29 and our principal risks on pages 64 to 65

Read more about the bonus and long term plan (LTP) in our remuneration report on pages 170 to 203

Our environmental performance in 2022/23

Our environmental performance creates value for

See the separate report on our website at **unitedutilities.com/globalassets/documents/corporate-documents/united-utilities-better-rivers-report-2023.pdf**

Industry-leading environmental performance and pollution reduction

The Environmental Performance Assessment (EPA) published by the Environment Agency (EA) consists of six metrics against which company performance is assessed on a red, amber or green (RAG) status. Based on performance across all of the metrics, star ratings (one to four) are then applied to each water company.

The EA will publish its assessment for 2022 in July 2023. The most recent assessment is for 2021, and we were awarded the maximum four stars, meaning we were classed by the EA as an 'industry-leading company', for the second year running. This was a strong achievement, particularly as the 2021 assessment used tighter thresholds than in previous years to assess companies' performance.

We have delivered a sustained reduction in pollution incidents, reducing by more than 57 per cent since 2011. In 2021, we had our lowest ever number of pollution incidents, and we were one of only two companies to be rated as green status for our serious incident (category 1 and 2 pollution) performance. This is the 11th year running that we have been rated as green status for our performance on serious incidents – the only company to have ever achieved this. We expect to achieve green status for serious pollution incidents and the total number of pollution incidents measure in the EA's assessment for 2022.

We were rated as green status for our discharge permits compliance, something we have achieved for two out of the last three years, and our performance of 99.0 per cent compliance was higher than the sector average of 98.7 per cent.

We achieved green performance for our delivery of the Water Industry National Environment Programme (WINEP). We have delivered 100 per cent of our WINEP schemes by their planned delivery date since the beginning of the current 2020–25 period (AMP7), delivering a total of 137 schemes in the financial year ending 2022 (562 schemes in total this AMP). These schemes are delivering improvements to rivers across the region.

Improving water quality in rivers across the North West

Many of our stakeholders are concerned about the country's rivers and particularly the impact of storm overflows. The time has come to change this century old practice, and we are committed to going further and faster to reduce the number of incidents where sewage flows into our rivers and seas.

This is a huge change, and achieving the improvement that is needed will not happen overnight. The North West has more rainfall and more combined sewers than elsewhere in the country. However, we are committed to delivering as quickly and as effectively as possible.

We have identified improving our rivers as one of our six strategic priorities. Last year we set out our commitments to improve river health across the North West. As part of Better Rivers: Better North West we set out four pledges supported by 30 specific commitments to kick-start a river revival in the region. This plan is a critical deliverable for our organisation, and we have made good progress so far.

The Environment Agency requires all water companies to fit monitors to their storm overflows in order to capture information on how they are performing. 97 per cent of the North West's storm overflows are now monitored and we will achieve 100 per cent by the end of 2023.

As a result of our considerable efforts to improve monitoring and operation of storm overflows, we have delivered a 39 per cent reduction in reported activations since 2020.

While we are pleased with progress we so far, we want to go further and faster to deliver improvements.

We have received provisional approval from regulators for over £900 million additional investment to make an early start on our AMP8 investment plans, mainly in relation to reducing activations from overflows, addressing a third of those we are targeting for improvement between now and 2030. We expect to spend £200 million of this over the next two years of AMP7.

Reducing our greenhouse gas emissions

We continue to work towards our long-term net zero ambition. In 2020, we committed to six carbon pledges, underpinned by ambitious science-based targets. These include switching to low carbon energy, greening our fleet, restoring peatland and creating woodland. We have already achieved two of our pledges in relation to 100 per cent renewable electricity and setting scope 3 science-based targets, and we are making good progress with the remaining pledges.

We are delivering landscape-scale change in our peatland restoration and woodland creation programmes. These programmes are not only beneficial from a carbon perspective, creating natural 'carbon sinks', but also deliver wider benefits to protect water and other natural resources, support nature, and enable recreational access for communities and tourism.

As the largest corporate landowner in England, our land assets provide an abundant scope for the development of renewable and other clean technologies. We have showcased our ability in this space, having previously grown a portfolio of renewable assets across the North West. Following the sale of these assets last year, we will be recycling the funds generated by that sale to invest in the next stage of our journey.

As an initial step, we are working on plans to develop up to 200 megawatts of new installed capacity by 2030. This programme could comprise a combination of solar, wind and batteries, helping to deliver emissions reductions and further improve both operating and financial resilience.

We have now shared our science-based net zero transition plan to achieve our climate change mitigation commitments.

Our scope 1 and 2 emissions target is to reduce emissions by 42 per cent by 2030 (from our 2019/20 baseline) and to further reduce this towards net zero by 2050.

We will also work with our supply chain to achieve two scope 3 targets. Firstly, for 66 per cent of our capital goods suppliers (by emissions) to have science-based targets by 2025. And secondly, for all other scope 3 categories, to achieve a 25 per cent reduction in emissions by 2030 (from a 2020 baseline).

We are part of the global movement of 'Business Ambition for 1.5°C: Our Only Future', and proud to be contributing to the UK water industry's commitment to be net zero.

For more details on our net zero transition plan see pages 45 to 47.

Climate resilience

We continue to invest across our business to protect and enhance the climate resilience of our assets, processes and customer services.

In December 2021 we published a comprehensive overview of our climate risks and plans in our latest climate change adaptation progress report. We have further integrated our approach to understanding the impacts of climate change in our latest Drainage and Wastewater Management Plan and our Water Resource Management Plan. This is part of our long-term adaptive planning for services that are resilient to a range of plausible climate change scenarios.

We continue to expand our approach to climate resilience, including engagement with stakeholders and interdependent service providers, such as the energy sector. Taking account of interdependent risks in our business planning process allows us to maximise the value we deliver for customers and other stakeholders through working together on common challenges. We are working with electricity distribution network operators to align investment, such as securing resilient energy infrastructure to our sites, as part of our business plan submission for 2025–30 and beyond.

Our annual disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) provide an update on our performance this year, and these can be found throughout this report, as set out on page 05.

39%
reduction in reported storm overflow activations since 2020

4*
industry-leading performance in the latest assessment from the Environment Agency

>£900m
accelerated investment to deliver environmental improvements earlier, mainly reducing overflow activations

Our environmental performance in 2022/23

Enhancing and protecting biodiversity and natural capital

We have developed a value assessment tool which has been used in the development of our future plans to incorporate broader natural capital into our decision-making process. We continue to deliver in line with our outcome delivery incentive (ODI) on enhancing natural capital value for customers, which encourages assessment of the added natural capital value we deliver by pursuing nature-based and catchment solutions – such as using wetlands to treat storm water at Southwaite wastewater treatment works. We are currently outperforming against this performance commitment and expect to improve this further in the remaining two years of AMP7.

Understanding broader value is a key element of driving partnership working and our Catchment Systems Thinking (CaST) approach, which seeks to understand the broader needs of a catchment and deliver these across multiple stakeholders to achieve the outcomes that are needed. This can be seen at the UK's first Catchment Nutrient Balancing trial at our Calthwaite wastewater treatment works on the River Petteril where we have delivered innovative treatment alongside catchment interventions to reduce total phosphorus entering the river. For more details see unitedutilities.com/Transforming-the-River-Petteril/

Following the development of the North West natural capital baseline, we have used it to bring together leading organisations from sectors such as land management, regulation, local government, academia and industry to form a regional natural capital governance group. There has been good support for this and agreement on how the group can improve our regional approach to management of natural capital and the data that supports this delivery.

Biodiversity is a key pillar of natural capital and ensuring the preservation and enhancement of biodiversity is a key element to our CaST approach. As an organisation delivering significant development in the North West we have committed to no net loss of biodiversity through our development for a long time, and we are increasing our delivery in this area.

We have a major impact on biodiversity through the significant amount of land we own that is designated as Site of Special Scientific Interest (SSSI). We have delivered significant investment to improve the condition of habitats on our land, aiming towards a commitment to have 100 per cent of our SSSI land in either favourable or recovering status by 2030.

We have been an active member of the Ofwat working group supporting the development of a new common performance commitment around biodiversity. Through this we are now developing our delivery programme to maximise the value that can be delivered for customers through this performance commitment.

During the year we have planted 104,493 trees to boost biodiversity, protect water quality and improve air quality. Our catchment land at Macclesfield Forest was one of the sites to benefit from planting 500 broadleaf saplings including Birch, Oak, Rowan, Hazel and Alder. These newly established native trees will establish themselves over the coming seasons to become an essential part of the forest habitat.

Over the past three years we have planted over 500,000 trees across the region, achieving our 2025 target ahead of schedule. We continue to identify suitable locations for tree planning and work towards our commitment to plant 1 million trees by 2030.

Strong performance tackling leakage despite challenging weather extremes

Reducing leakage is of huge importance for our stakeholders and for us as an organisation.

We have met our leakage target for the 17th consecutive year. Customer ODI performance on leakage is based on a three-year average, and our average leakage over the last three years is at its lowest ever level. As a result of this strong achievement we expect to receive an outperformance payment this year in relation to our leakage performance commitment.

2022/23 has been a challenging year for our leakage reduction programme. A very severe freeze-thaw event in December 2022 impacted distribution-side (company) and customer-side (private) leakage levels, and some customers experienced short-term interruptions to their water supply. A recovery plan was implemented and we reduced leakage levels back to the levels they were at prior to the freeze.

A number of key activities made up our recovery plan:

- We increased our efforts to promote leakage and used online channels for customers to report leaks, for example using our app;
- We used our fleet of around 70,000 acoustic sensors to identify and pinpoint leaks more efficiently;
- We managed network pressures using around 4,000 pressure management valves, many of which can be controlled remotely;
- We increased resources detecting and repairing leaks, as well as increasing our logger teams to detect leaks that would not be found using traditional manual techniques;
- We worked with our partners and supply chain to speed up leak repairs; and
- We used our partner and company vehicles with digital messaging to run specific advice across the region, alongside existing vans which now carry all-year-round leakage-related messaging.

Over AMP7, we are targeting a reduction in total leakage of at least 15 per cent, with a delivery plan that continues to make best use of available technologies and is flexible to ensure that we can embrace the heightened level of innovation in this area. We actively look to trial new techniques to understand how these can be scaled and embedded in the most effective way, and this gives us opportunities to accelerate and target those interventions which are demonstrated to be the most effective. We continue to use the learning from these pilots and trials to refine our approach to reducing leakage and deliver our dynamic network management (DNM) ambition.

Status key

Annual performance	Against 2025 target
Met expectation/target	Confident of meeting target
Close to meeting expectation/target	Some work to do
Behind expectation/target	Target unobtainable

Assurance key

ITV Independent third-party verification

RRA Regulatory reporting assurance

IAT Internal audit team

Measure	2025 target	Performance 2022/23	Performance 2021/22	Performance 2020/21	Link to assurance	Link to remuneration[2]	Link to main stakeholder	Status: Annual performance	Status: Against 2025 target
Pollution incidents per 10,000km sewer network[1]	19.5	**16.29**	17.71	18.10	RRA	LTP			
Reduction in reported storm overflow activations	33% sustainable reduction	**39%**	28%	n/a	IAT				
Treatment works compliance[1]	100%	**98.45%**	98.98%	99.75%	RRA	LTP			
Leakage reduction[1]	15%[3]	**6%**	8%	5%	RRA	LTP			
Reduction in per capita consumption[1]	6.3%[4]	**0.5% increase**	1.5% increase	1.7% increase	RRA	PC			
Internal flooding incidents per 10,000 sewer connections[1]	1.34	**2.32**	2.98	4.47	RRA	PC			
External flooding incidents[1]	5,859	**5,916**	6,223	6,849	RRA	PC			
Waste to beneficial use	98%	**98.3%**	97.8%	97.3%	IAT				
Enhancing natural capital for customers[1]	£4 million	**£0**	£3.234 million	Delivery from 2022	RRA	PC			
Number of trees planted	500,000	**565,733**	461,240	216,601	IAT				
Carbon pledge 1: reduction of scope 1 & 2 GHG emissions	14% reduction[5] (42% by 2030)	**3.6% reduction**	2.20% reduction	1.5% increase	ITV				
Carbon pledge 2: renewable electricity purchased	100% by 2023	**100%**	96%	93%	ITV				
Carbon pledge 3: green fleet	100% by 2028	**33 vehicles**	27 vehicles	28 vehicles	IAT	LTP			
Carbon pledge 4: peatland restoration	1,000 hectares (ha) by 2030	**585 ha**	Activity underway	Plans for 5 sites	ITV	LTP			
Carbon pledge 5: woodland created	550 hectares (ha) by 2030	**37 ha**	9 ha	9 ha	ITV	LTP			
Construction services suppliers with science based targets	66%	**23%**	n/a	n/a	IAT	LTP			
Better air quality: nitrogen oxides (NOx) emissions per unit of renewable electricity generated[1]	1.42	**1.07**	1.19	1.30	RRA	PC			
Electricity generated directly and with partners as % of used	Under review	**24%**	26%	25%	IAT				

(1) Measure relates to United Utilities Water Limited.

(2) PC = Performance commitment subject to reward and/or penalty as part of customer outcome delivery incentives (ODIs). These feed into both bonus and LTP through inclusion of customer ODIs and return on regulated equity (RoRE) respectively. Read more about the bonus and long term plan (LTP) in our remuneration report on pages 170 to 203.

(3) As measured against a 2017/18 baseline.

(4) As measured against a 2019/20 baseline.

(5) As measured against science based target baseline year 2019/20.

Stock code: UU.

Our environmental performance in 2022/23

Better Rivers: Better North West – working with others to improve river health

We have an important role to play in improving river health across the region, engaging with local communities and interested organisations. Our river rangers and Future Rivers Forum are two ways in which we are working with others to respond to the challenge.

To protect our rivers and help to keep them healthy, we have recruited a brand new team of six river rangers who will be based across the region. The rangers will be working with teams across our catchments, forging close links and engaging with community groups and organisations and collaborating with them to improve the environment and river water quality in those areas. They'll be proactively patrolling the banks of rivers, checking assets to organise maintenance and cleaning litter and debris to mitigate against the aesthetic impact of our operations. The river rangers' work will allow us to further understand the quality of rivers across our region and what more we need to do to protect their health and help them thrive. If successful, we plan to hire more rangers to support our activities right across the North West.

In partnership with the Rivers Trust, we hosted the North West's first Future Rivers Forum to drive awareness and address the challenges that face rivers across the region including climate change, population growth and pollution. The Future Rivers Forum brought together a cross section of people and organisations including local authority representatives, North West businesses, environmental bodies, water sector regulators and local community figures to encourage greater collaboration to improve the health of the region's rivers.

The day consisted of a mixture of speakers as well as networking and interactive sprint workshops to identify new opportunities to work together. Attendees discussed the challenges their industries face, shared solutions and committed to put words into actions and create a lasting impact that goes beyond the day's events. Collaboration, funding, and nature-based solutions were key themes to emerge from discussions.

Delivering value for

> "The river rangers will be working with teams across our catchments to forge close links and engage with community groups and organisations."

Read more about our Better Rivers commitments on our website at unitedutilities.com/corporate/responsibility/environment/reducing-pollution/storm-overflows/our-commitments-to-river-health

> "We are focused on improving our energy resilience and self-generation capacity, with a target of achieving 50 per cent self-sufficiency by 2030."

Investing in renewable energy to build resilience and support our net zero ambition

Clean energy is a naturally adjacent business to water and wastewater services, providing us with resilience and helping us to reduce our greenhouse gas emissions and work towards achieving our net zero target.

We own and manage 56,000 hectares of land, and we plan to maximise our land bank to help us build a greener future. We have identified 140 sites with scope for development of renewables and other clean technologies. We are focused on improving our energy resilience and self-generation capacity, with a target of achieving 50 per cent self-sufficiency by 2030.

We have demonstrated our ability in this space, having previously delivered a portfolio of renewable energy assets across the North West. Through the sale of our subsidiary, United Utilities Renewable Energy Limited, last year we retained the benefits of the clean energy through long-term power purchase agreements, but have freed up capital enabling us to accelerate deployment of our clean energy strategy.

As an initial step, we are working on plans to develop 150 megawatts of new installed capacity by 2030. This programme will be made up of a combination of solar and batteries.

With a substantial increase in the size of our capital programme expected in AMP8 and beyond to meet new environmental obligations, this places significant upwards pressures on emissions with our annual energy consumption expected to increase, as discussed in our transition plan on pages 45 to 47.

Increased self-generation will help towards our emission reduction targets, and it will improve financial resilience, which is particularly important with power markets becoming more volatile in recent years. Investment in batteries will improve operating resilience, protecting key assets and sites in the event of a grid outage.

Delivering value for

Read our net zero transition plan on pages 45 to 47

Progress against our carbon pledges

In 2020 United Utilities made six pledges that set out our initial priorities in the global goal to curb climate change to no more than 1.5°C. Our progress meeting these pledges is below.

Pledge 1

42% reduction of scope 1 & 2 emissions from our 2020 baseline by 2030

Our progress

↓ 3.6% Confident of meeting pledge

We are making good progress towards our pledge and SBT, having made a year-on-year 1.5 per cent reduction from 2021/22. Progress is not expected to be linear while we have emerging challenges that drive increasing emissions.

2019/20: 138,961 tCO_2e Baseline
2022/23: 133,930 tCO_2e 3.6% reduction

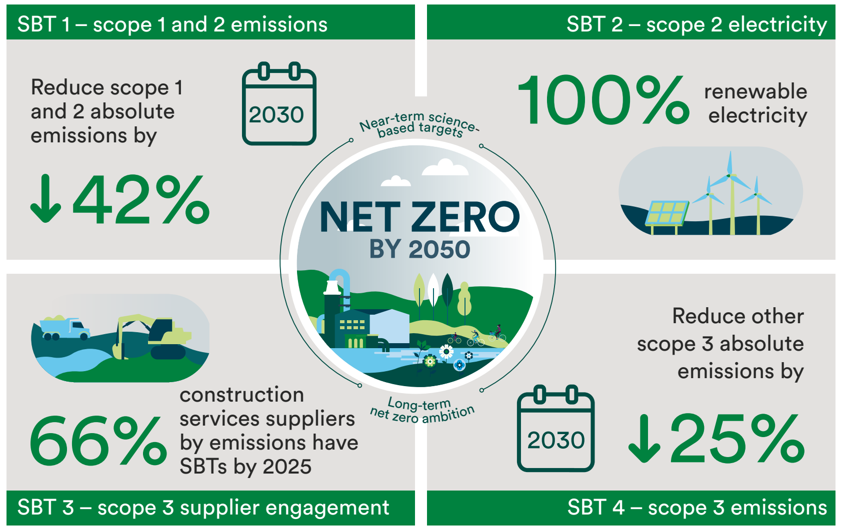
Pledge 2

100% renewable electricity by 2021

Our progress

100% Pledge met

Since October 2021 all electricity we use is renewable. Around 25 per cent of our needs are renewably generated directly by us or with partners and the remainder is purchased on a renewable tariff backed with REGO certificates. We are working on plans to increase the energy we can self-supply through new investment in renewable capacity and storage.



Pledge 3

100% green fleet by 2028

Our progress

33 vehicles Confident of meeting pledge

Our initial focus has been on understanding the travel patterns of our fleet. With this insight we have begun the delivery of the required charging infrastructure, the purchase of an initial 200 electric vehicles and are continuing to explore options for HGVs.

We are also supporting colleagues to switch to electric with a salary sacrifice scheme.

Remuneration: LTP

Pledge 4

1,000 hectares of peatland restoration by 2030

Our progress

585ha Confident of meeting pledge

We have peatland restoration activities across the North West at different stages of maturity including the 2000ha improved through our 2005–15 SCaMP projects. We have 585ha currently under restoration towards meeting this pledge.

Remuneration: LTP

Pledge 6

Set a scope 3 science-based target by 2021

Our progress

SBTs verified July 2021 Pledge met

We have two science-based targets which between them cover all our relevant scope 3 emissions. 29 per cent of our scope 3 emissions are from our construction services partners delivering infrastructure as part of our AMP7 business plan. We are working with our partners to reduce the emissions from building these projects by supporting their own environmental ambitions and encouraging them to set their own science-based targets. 23 per cent of these suppliers (by 2022/23 emissions) have set SBTi verified science-based targets for their organisation and approximately 60 per cent more have either made an SBTi or other public commitment statement to set targets that are science-based.

Remuneration: LTP

Pledge 5

Plant one million trees to create 550 hectares of woodland by 2030

Our progress

37ha Confident of meeting pledge

Weather and tree disease slowed our planting progress but we have two well established nurseries and plans for more and have identified hundreds of sites for new and 'replanted' woodlands.

Remuneration: LTP

TCFD Energy and carbon report

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

We use the financial control approach so our energy and carbon accounting is aligned with the consolidated financial statements for United Utilities Group PLC for 1 April 2022 to 31 March 2023. This includes subsidiaries listed in section A8 on page 286.

Our greenhouse gas inventory, including the underlying energy data summarised below, has undergone independent third-party verification by the Achilles Group to the requirements of Toitu CarbonReduce programme.

	2022/23 GWh	2021/22 GWh	2020/21 GWh	2019/20 GWh
Energy use				
Electricity	818.8	803.3	807.3	802.3
Natural gas	33.6	33.8	40.0	38.3
Stationary fossil fuels (Gas oil, kerosene, diesel)	59.8	50.5	36.5	50.8
Stationary low carbon fuels (HVO, LPG)	<0.1	<0.1	0	0
Energy for transport (from fuel used or distance travelled)	71.7	72.6	67.5	65.5
Total energy used	983.9	960.2	951.3	956.9
Electricity purchased				
Grid renewable	655.7	611.0	591.4	602.9
Grid standard tariff(1)(2)	<0.1	22.3	47.8	40.8
Total purchased	655.7	633.3	639.2	643.7
Renewable energy generated				
CHP	123.0	133.8	127.6	121.5
Solar	46.4	47.8	50.7	42.6
Wind	5.1	4.8	5.3	5.7
Hydro	6.9	7.2	6.9	6.8
Biomethane(3)	14.5	15.9	14.8	14.2
Total generated	195.9	209.5	205.3	190.8
Renewable energy exported				
Electricity	18.3	23.5	22.4	18.1
Biomethane(3)	14.5	15.9	14.8	14.2
Total exported	32.8	39.4	37.2	32.3

(1) Non half hourly metered supplies were on a standard tariff up to the end of September 2021. The emissions were 289g CO_2e/kWh in 2019/20, 178g CO_2e/kWh in 2020/21 and 188g CO_2e/kWh in 2021/22. Non half hourly supplies moved to a new supplier on a 0g CO_2e/kWh renewable tariff on 1 October 2021.

(2) The residual electricity on a standard tariff is associated with default tariffs for recently adopted sites.

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

Energy strategy

Our energy management strategy has four objectives:

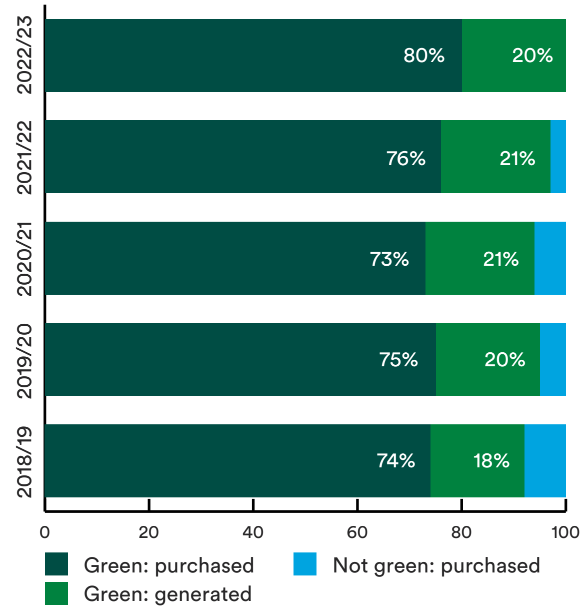
- Efficient use of energy;
- Maximising self-generation and direct supply opportunities;
- Reducing costs (through time of use); and
- Supply resilience to ensure we can deliver our services.

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

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

100 per cent green electricity transition

Since October 2021 100 per cent of our electricity used has either been renewably generated on site or its purchase backed by REGO (Renewable Energy Guarantee of Origin) certificates.



Energy efficiency actions taken

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

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

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

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

We have a dedicated investment programme to implement targeted energy solutions in current operations. Examples invest-to-save projects include pump optimisation, time-of-use actions and improved control of wastewater treatment. We are also working to ensure energy and chemical efficient outcomes from our capital programme.

Our environmental performance in 2022/23

TCFD Greenhouse gas emissions inventory

Our greenhouse gas inventory (including all the underlying energy data) has undergone independent third party verification by Achilles group and is certified to the requirements of the Toitu CarbonReduce programme, as aligned to the GHG Protocol Corporate Accounting and Reporting Standard (2015) and the international carbon reporting standard ISO 14064, Part 1:2018. The assurance certificate and report can be found at **unitedutilities.com/corporate/responsibility/environment/climate-change**

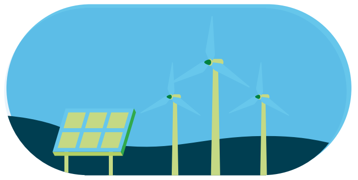
Emissions are calculated by estimating the individual greenhouse gases that result from all United Utilities' activities, converted into a carbon dioxide equivalent (tCO_2e). Emissions have been estimated using the UK water industry Carbon Accounting Workbook. v17 (CAW v17), the 2022 UK Government GHG conversion factors for company reporting and CEDA Global '22 (Comprehensive Environmental Data Archive) factors. We report scope 1, 2 and all relevant scope 3 emissions.

Scope 1

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

Scope 2

Emissions from purchased electricity including for use in vehicles.



Scope 3

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

Scope 1 & 2 greenhouse gas emissions		2022/23 tCO_2e	2021/22 tCO_2e	2020/21 tCO_2e	SBT baseline 2019/20 tCO_2e
Scope 1:					
Direct emissions from burning of fossil fuels		**21,339**	19,207	17,371	15,247
Process and fugitive emissions – including refrigerants		**94,915**	96,020	98,569	96,186
Transport: Company-owned or leased vehicles		**17,665**	16,507	16,634	15,739
Scope 2:					
Purchased electricity – generation	Market-based(1)	**9.3**(5)	4,201	8,507	11,789
	Location-based(2)	***126,813***	*134,492*	*149,030*	*164,521*
Purchased electricity – vehicles	Market-based	**1.7**	0.04	0	0
	Location-based	***1.7***	*0.04*	*0*	*0*
Total scope 1 & 2 emissions (Gross)	Market-based	**133,930**	135,936	141,081	138,961
	Location-based	***260,734***	*266,226*	*281,604*	*291,693*
Emissions reduction from					
Renewable electricity exported(3)		**-1,310**	-4,317	-4,184	-3,979
Biomethane exported(4)	*Location-based*	***-9,360***	*-10,283*	*-9,725*	*-9,302*
Green tariff electricity purchased	*Location-based*	***-125,746***	*-133,197*	*-138,015*	*-164,210*
Total scope 1 & 2 emissions (Net)	Market-based	**132,620**	131,619	136,897	134,982
	Location-based	***124,318***	*118,429*	*129,680*	*114,202*

(1) Market-based figures use emission factors specific to the actual electricity purchased. If electricity is on a standard grid tariff they are calculated using factors from suppliers' published fuel mix disclosures.

(2) Location-based figures use average UK grid emissions to calculate electricity emissions and are shown in *italics*.

(3) Exported electricity emissions use the average UK grid emissions factor for both market and location-based totals.

(4) Exported biomethane was sold with green gas certificates so has zero emissions reduction benefits in market-based accounts.

(5) The residual market-based electricity emissions is associated with default tariffs for recently adopted sites.

Scope 3 greenhouse gas emissions	2022/23 tCO_2e	2021/22 tCO_2e	2020/21 tCO_2e	SBT baseline 2019/20 tCO_2e
Category 1: Purchased goods and services(6)	**250,189**	292,946	271,871	213,442
Category 2: Capital goods(6)	**138,182**	112,498	95,968	128,286
Category 3: Fuel and energy-related emissions(7)	**53,487**	58,948	42,599	45,262
Category 4: Upstream T&D – sludge transport(7)	**35**	103	1,119	3,374
Category 5: Waste generated in ops: including sludge disposal(7)	**27,454**	25,458	26,333	27,936
Category 6: Business travel: public transport, private vehicles and hotel stays(7)	**1,486**	1,138	1,226	3,508
Category 7: Employee commuting and homeworking(8)	**5,336**	4,066	4,108	4,231
Total scope 3	**476,169**	495,158	443,224	426,039
Scope 3 SBT measure (excluding category 2)	**337,987**	382,660	347,256	297,753

(6) For Category 1 and 2 we use CEDA Global '22 (an EEIO (environmentally-extended input-output) inventory) to estimate emissions based on the £ spent by spend category.

(7) Category 3, 4, 5 and 6 use company activity records and UK Government conversion factors.

(8) Category 7 uses EcoAct models to estimate emissions from employee commuting and homeworking based on company FTE figures and home, site, hybrid working patterns.

United Utilities' greenhouse gas emissions intensity

As in previous years, we report the regulated emissions kilograms CO_2 equivalent per megalitre treated (using the location-based method as calculated in the CAW v17), as these are common metrics for our industry.

We also state our scope 1 plus 2 emissions (market-based) as tonnes CO_2 equivalent per £million revenue.

Regulated emissions per megalitre water treated (kg)

2022/23	**101.4**
2021/22	106.91
2020/21	118.51

Regulated emissions per megalitre sewage treated (kg)

2022/23	**158.76**
2021/22	144.21
2020/21	152.26

Scope 1 and 2 emissions (gross) per £m revenue (tCO_2e)

2022/23	**73.4**
2021/22	73.0
2020/21	78.0

Scope 1 and 2 emissions (net) per £m revenue (tCO_2e)

2022/23	**71.4**
2021/22	70.7
2020/21	75.7

Scope 1 emissions

Wastewater and sludge processes cause approximately 70 per cent of our scope 1 emissions as the gases released, nitrous oxide (N_2O) and methane (CH_4) have much greater global warming potentials than carbon dioxide (CO_2). Our process emissions are currently estimated as a direct function of the amount of wastewater we treat. We are undertaking research with other UK water companies to better quantify these emissions from measured values and to find ways to reduce or capture those emissions for beneficial use.

Scope 2 emissions

Our market-based scope 2 emissions are negligible as our agreed supply contracts are REGO backed renewable tariffs.

Scope 3 emissions

Most of our scope 3 emissions are in GHG Protocol categories 1 (products and services) and 2 (capital goods); the latter being those provided by our construction services suppliers. We currently calculate category 1 and 2 emissions using records of the amount we have spent. This provides an indicative estimate but is determined by the scale of our investment programme rather than our design choices. We are working internally and with supply chain partners to enhance our data and systems so that we can calculate these emissions based on types and quantities of materials used, thereby showing the full impact of our management decisions.

The next highest category is indirect emissions from fuel and energy use. Electricity and fuels used at our operational sites make up 90 per cent of this quantity, so our clean energy and renewable generation ambitions will reduce these as well as scope 1 emissions.

Fuel and energy 21,339 tCO_2e + 54,487 tCO_2e

Fuel and energy emissions include scope 1 emissions from burning of fossil fuels such as kerosene in our treatment processes and also scope 3 emissions associated with the losses from well to tank and in transmission and distribution. We are investigating and trialling ways to reduce our use of fossil fuels through both efficiencies and use of alternative low emission fuels.

Purchased goods and services 250,189 tCO_2e

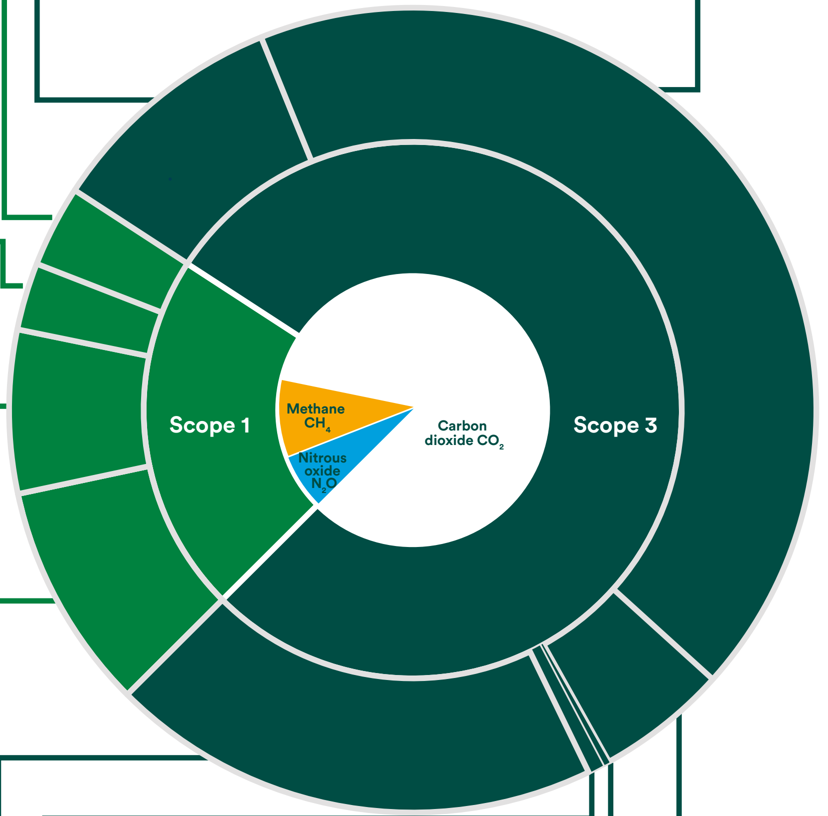
We currently estimate our emissions from purchased goods and services based on the records of the amount we have spent using CEDA Global '22. This gives us a comprehensive but indicative estimate of scope 3 emissions. We are looking to change key emission categories, such as those from chemicals, to a product-based or supplier-based emissions factor which will enable us to make operational and purchasing decisions based on the carbon impact. To do this, however, we are reliant on our suppliers carrying out and publishing life-cycle carbon assessments.

Transport 17,665 tCO_2e

We made a ten-year green fleet commitment in 2018 to convert our fleet to low-carbon fuels. We have begun our investment in electric vehicles and are exploring options to fuel HGVs, including hydrogen and HVO.

Sludge processing 38,886 tCO_2e

Processing of sludge releases methane. Half of our facilities use advanced digestion which captures more of this methane to power and heat our processes or generate electricity. This reduces the methane lost as an emission.



Wastewater processing 55,665 tCO_2e

The biological processes used in wastewater treatment produce N_2O and CH_4 both potent GHGs. Emissions are approximately proportional to the size of the communities producing the wastewater. Recent monitoring studies show that they may be far higher than the UK water industry currently estimate, but further knowledge will enable mitigation.

Capital goods 138,182 tCO_2e

We have a significant capital programme to develop our water and wastewater services infrastructure and this construction will drive substantial emissions.

Employees – commuting and homeworking 5,336 tCO_2e

Estimated based on our colleagues numbers and ways of working (office/site based or hybrid) using EcoAct's UK models.

Business travel 1,486 tCO_2e

Public transport, private vehicles and hotel stays.

Sludge transport 35 tCO_2e

Contracted sludge transport.

Waste (biosolids to land) 27,454 tCO_2e

97 per cent of these emissions are from disposal of sludge biosolids to agricultural land. Recent UKWIR data shows that the industry estimation method is likely to be significantly overestimating these emissions.

Our social performance in 2022/23

How we measure performance

Our key performance indicators for building a healthier North West are colleague engagement, customer satisfaction as measured through our ranking within Ofwat's C-MeX survey, and the number of customers lifted out of water poverty. We report on a selection of other social metrics of interest to stakeholders on page 101.

HEALTHIER

S Supporting society

Strategic priorities

- Provide a safe and great place to work
- Deliver great service for all our customers

Contributing to

1 No poverty · 6 Clean water and sanitation · 8 Decent work and economic growth

Overview

We put customers at the heart of everything we do and are focused on continually improving performance and supporting customers with affordability and vulnerability.

We met or beat 83 per cent of our performance commitments this year – our best ever performance, and we were the top performing listed company in Ofwat's measure of customer satisfaction, C-MeX.

We have supported over 330,000 households through our affordability schemes so far in AMP7, and this year hosted collaborative summits on affordability and vulnerability to share best practice ideas and work together to improve help and advice for customers in the North West.

Our colleagues are critical to the success of our business, their health, safety and wellbeing is paramount, and it is important we give them the opportunity to develop their skills and knowledge and support them with the most effective technology.

We are committed to promoting and improving diversity and inclusion, and our colleague engagement score was higher than both the UK norm and Utilities norm benchmarks.

We are committed to improving health, safety and wellbeing, and have reduced our accident frequency rate for colleagues every year for the last five years.

Colleague engagement

Definition
Level of colleague engagement as measured by our annual colleague opinion survey.

Target
At least as high as Utilities norm benchmark

Annual performance

82%

We have achieved a strong set of results this year, scoring well against external benchmarks, and despite falling slightly since last year our overall engagement score is higher than both the UK norm and Utilities norm benchmarks.

2021/22: 87%
2020/21: 89%

Status
Met expectation/target

Link to stakeholder

Link to material issues

- Colleague engagement
- Diverse and skilled workforce
- Health, safety and wellbeing

Link to risks

- Resources
- Health, safety and environmental

Link to remuneration
n/a

Link to assurance
Independent third-party verification

C-MeX ranking[1]

Definition
Ofwat's customer measure of experience (C-MeX), comprising two surveys – the customer service survey, and the customer experience survey.

Target
Upper quartile against water and sewerage companies (WASCs)

Annual performance

2nd quartile

We continue to be the highest performing listed company, ranked fourth out of the WASCs, and fifth out of all 17 companies. We expect to achieve a £3 million reward for C-MeX this year.

2021/22: 4th WASC, top listed company and 7th overall, earning £2.3m reward

2020/21: 4th WASC, top listed company and 5th overall, earning £2.1m reward

Status
Close to meeting expectation/target

Link to stakeholder

Link to material issues

- Customer service and operational performance
- Trust, transparency and legitimacy
- Political and regulatory environment

Link to risks

- Water service
- Wastewater service

Link to remuneration
Bonus

Link to assurance
Regulatory reporting assurance

Customers lifted out of water poverty[1]

Definition
Where our support acts to lift a customer out of water poverty which is defined as spending more than 3 per cent of income on their water bill.

Target
At least 66,500 customers lifted out of water poverty by 2024/25

Annual performance

84,002

We have helped more than 80,000 customers out of water poverty. The increase on last year has been driven by the number of customers supported via lower bill tariffs following wider increases in the cost of living.

2021/22: 77,312
2020/21: 71,057

Status
Met expectation/target

Link to stakeholder

Link to material issues

- Affordability and vulnerability
- Customer service and operational performance
- North West regional economy

Link to risks

- Retail and commercial
- Political and regulatory

Link to remuneration
LTP

Link to assurance
Regulatory reporting assurance

Status key

Annual performance

- Met expectation/target
- Close to meeting expectation/target
- Behind expectation/target

[1] Measure relates to United Utilities Water Limited.

Read more about our approach to materiality on pages 28 to 29 and our principal risks on pages 64 to 65

Read more about the bonus and long term plan (LTP) in our remuneration report on pages 170 to 203

Our social performance in 2022/23

Our social performance creates value for

Affordability

Affordability support remains a key focus area and over the last year we have seen a 95 per cent increase in the number of customers asking for help with their bills. We have supported more than 330,000 households so far in AMP7 through our comprehensive range of affordability schemes. We extended the eligibility criteria for our social tariff in 2022, as part of our cost of living response, enabling us to support low income customers who have a change of circumstances that reduces their income.

We've increased our efforts to support customers with management of their bills, many of whom will be disproportionately impacted by the cost of living increases, highlighting the support we have available. Utilising data, we're monitoring customer payment behaviour to proactively identify customers showing signs of struggling to pay. So far we've sent over 300,000 early intervention emails with tailored messaging designed to increase customer awareness of the support we and third-party organisations can offer.

In January we held our fourth affordability summit bringing together partner agencies and key stakeholders to highlight the importance of collaborative cross-sector working. Attendees from councils, charities, energy companies, housing associations and others shared experiences and discussed ways to be more joined up when it comes to helping people across the region. We remain supportive of the Consumer Council for Water's drive to introduce a national social tariff, which would help to provide a more equitable sharing of support for customers across the country.

Vulnerability

We are a leader in vulnerability assistance in the water industry, with a wide range of support schemes for customers, many of which are firsts for the industry.

During the year we underwent an audit of our Priority Services offering against the new ISO Consumer Vulnerability standard, ISO 22458:2022. Every required standard was achieved, with no non-conformances or recommendations for improvement, and we are now one of the first in the industry to hold the accreditation. In reviewing how we support vulnerable customers, assessors looked at how the company makes its services accessible to all through a variety of communication options, the ways it supports colleagues so they have the skills and confidence to help customers in the most appropriate way, and what it does to ensure compliance with regulatory requirements. They met people from across the customer team and listened in to calls to understand how the processes are put into practice. Assessors were impressed with how our customer care approach is embedded right across the organisation, the range of help we provide, and our constant desire to improve.

In November we held our first ever vulnerability summit. This was the first we've hosted specifically on the subject of customer vulnerability showcasing how we support vulnerable people on Priority Services, billing, incidents, struggling to pay, water meters and water efficiency. Attendees from different vulnerability charities, the NHS, voluntary organisations, councils, utility providers and housing associations provided us with useful feedback on our Priority Services scheme and highlighted ways we could all work together more around many of our common challenges. Delegates told us that they welcomed the addition of signing to accompany the presentations, helping to demonstrate how we're starting to communicate to customers via British Sign Language during events.

Providing great customer service

Our operational performance has been strong this year, and we have met or exceeded 83 per cent of our performance commitments – our best ever performance – achieving a £25 million reward against customer outcome delivery incentives (ODIs).

Our investment in water quality, principally avoiding discolouration, has supported a 25 per cent reduction in discoloured water events in the last 12 months and a subsequent 26 per cent reduction in customer contacts for discoloured water.

This has been supported by our Water Quality First programme, launched in 2021 with the aim of providing customers with industry-leading water quality. Alongside improvements to our assets, such as cleaning over 15,000 kilometres of mains to reduce the risk of discolouration, over 5,000 colleagues and many of our key supply chain partners have completed an e-learning module on water quality.

While we have seen a significant improvement in discolouration, we know there is still work to do to improve our overall performance. The DWI is satisfied we're heading in the right direction and we have the right people and plans in place to continue to improve.

The reduction in water quality contacts is contributing towards our ODI reward, alongside other water measures such as water service resilience and supporting the removal of lead pipes from customers' properties.

Reducing leakage is of huge importance for our stakeholders and for us as an organisation. Customer ODI performance on leakage is based on a three-year average, and our average leakage over the last three years is at its lowest ever level, for which we expect to earn a reward this year. Reducing leakage is critical to help us manage water resources and we are challenging ourselves to go further in reducing leakage from our network and in customer properties.

Our basket of measures for avoiding flooding is also delivering a net ODI reward, and we have made great progress in reducing flooding incidents. We have nearly halved the number of internal sewer flooding incidents since the start of AMP7. This year's performance includes a 39 per cent reduction in repeat internal flooding incidents - these are incidents affecting a customer that has already experienced a previous incident. This has been supported by our investment in Dynamic Network Management (DNM).

We have experienced periods of volatile weather this year including a very dry summer in 2022, but customers in the North West experienced no temporary use restrictions. We have delivered our largest ever reduction in per capita consumption (PCC), supported by engagement activity to encourage customers to use less water and by talking about the link between heating water and energy bills.

In the winter, we experienced an extremely rapid freeze-thaw event that resulted in burst pipes across our region. Our teams and partners worked exceptionally hard to minimise the disruption. However, some customers experienced short-term interruptions to their water supply, which led to an ODI penalty against this performance commitment.

Our strong performance on customer service metrics has helped us to drive a 14 per cent reduction in written complaints from customers this year, achieving our lowest ever volume.

We are also proud to have been re-accredited with the Institute of Customer Service – Service Mark with Distinction award, one of only 18 brands to achieve the distinction status.

Customer satisfaction

The great service we've delivered for customers has been reflected in further improvement this year in our performance against Ofwat's measure of customer satisfaction, C-MeX. We continue to be the highest performing listed company, ranked fourth out of the water and wastewater companies and fifth overall out of all 17 companies. We expect to achieve a record £3 million reward for our C-MeX performance this year.

Customer service is hugely important to us. Every month we receive fantastic feedback from customers telling us how, in their opinion, our colleagues have gone the extra mile. We were proud to become the first company ever to receive 100,000 commendations from customers through the WOW! Awards scheme, where customers provide independent, proactive feedback on the service we provide, and nine colleagues received over 500 WOW! nominations from customers.

330k
households helped so far in AMP7 through our affordability schemes

83%
performance commitments met or beaten this year

100k
WOW! Award nominations for great customer service

Our social performance in 2022/23

Cash collection

Cash collection performance has been good this year and our household bad debt charge has remained stable at 1.8 per cent of regulated revenue. Only £1.6 million of our net household debtors are aged by more than one year, showing we are not storing up a problem for future bad debts. We have a high level of direct debit penetration, at 72 per cent, and overall over 81 per cent of customers are on payment plans. This helps to provide a high degree of collection certainty and enables us to spot potential affordability issues early, at the first missed payment, so that we can make contact swiftly.

For customers that need affordability support, we can quickly get them onto the right scheme to help them get back on track. For those customers that can afford to pay but choose not to do so, we have a comprehensive data-led approach to collections that helps us accurately pursue payment in an efficient and timely manner. This includes a range of techniques, such as 'nudging' customers through email or text if a payment is late, enhanced credit reference sharing, and credit reporting.

A safe and great place to work

We have continued to embed 'home safe and well' across the business, which focuses on the behavioural aspects of our health, safety and wellbeing culture.

Our colleague accident frequency rate for 2022/23 was 0.072 accidents per 100,000 hours worked, lower than last year and amounting to nine accidents reported. We have focused risk-based plans in place to maintain progress toward our 2025 target of a 10 per cent year-on-year improvement in performance.

Our contractor accident frequency rate increased slightly to 0.078 accidents per 100,000 hours worked, following an unusually low performance in 2021/22. 60 per cent of incidents were from four contractors and we are increasing our monitoring of their performance and working together to review their improvement plans.

In recognition of our commitment to health and safety, we were awarded the Royal Society for the Prevention of Accidents (RoSPA) gold standard medal for the 11th consecutive year. In support of colleagues' wellbeing we have again retained the Workplace wellbeing charter accreditation.

Focusing on equity, diversity and inclusion (ED&I)

We want fantastic people to enable us to deliver a great service now and into the future. We are supporting colleagues to achieve their full potential and to feel valued and included, regardless of their gender, age, race, disability, sexual orientation or social background, and we make sure we are reaching and recruiting from every part of our community.

Our workforce profile remains at 65 per cent male and 35 per cent female. This year we have set measurable and actionable ambitions on gender, ethnicity and women in senior positions, as part of our ED&I plan. See more on equity, diversity and inclusion on pages **54 to 55**.

Attracting and developing future talent

We want to inspire and attract people into STEM careers and have many outreach activities to reach people from the widest talent pools. We've committed to supporting the '10,000 Black Interns' programme over the next five years. During the year, we welcomed 23 students onto placements, with 56 per cent of those who were ready for employment being offered a role with us. We continue to run events, including our 'Engineering Masterclass', with local secondary schools. 95 per cent of students who attended this year's masterclass said they were extremely interested in pursuing a STEM-related career. All of the attendees said they would recommend the session and now have a better understanding of engineering at United Utilities.

Our award-winning graduate and apprentice programmes

In the last 12 months, 61 apprentices have joined us on operational, service and future-facing digital and environmental schemes. We continue to deliver a high-quality training provision at our dedicated training centre and our award winning scheme is outperforming the UK success rate of 96.7 per cent against a national average of 51.8 per cent. In 2022, all our apprentices passed their qualification including 46 per cent who received a distinction. 30 per cent of our apprentices are female. We are on track to demonstrate our Better Rivers commitment of 100 new 'green apprenticeships' by 2025. We look forward to welcoming 30 graduates and 42 apprentices in September 2023, including 31 roles classified as green apprenticeships. We are delighted that 22 of our apprentices to qualify this year are leakage technicians, a key part of our AMP7 leakage commitment.

At the 2022 North West Apprenticeship Awards, we won the Recruitment Excellence Award, recognising our commitment to diversity in apprenticeship recruitment and were Highly Commended in the Macro Employer of the Year category. After winning North West Intermediate Apprentice of the Year, our credit controller apprentice Samuel Johnson won the award for Intermediate Apprentice of the Year at the National Apprenticeship Awards.

Strengthening our leadership talent pipeline

We continue our efforts to develop a strong female leadership pipeline through our leadership talent programmes. We launched our partnership with Women on Boards to support female colleagues' development into senior roles.

Awards and recognition

We are proud to have been ranked 11th in the Inclusive Companies Top 50 UK Employers list, reinforcing our pledge to take action on diversity and inclusion and recognising our commitment to creating a more equal and inclusive workplace.

We have improved our position in the Financial Times Inclusive Leaders Index 2023, which assesses companies' success in promoting diversity aspects, such as gender, age, ethnicity, disability and sexual orientation, in their workforce. We were placed 89th out of 850 companies across Europe, and are the only UK utilities company in the top 100.

We are proud to be included once again in the Bloomberg LP Gender-Equality Index, which tracks the performance of public companies committed to transparency in gender-data reporting.

Training and development

During the year, we have delivered over 20,000 days of training, ensuring our colleagues have the right skills, knowledge and behaviours to safely and effectively undertake their roles. A major delivery this year was the water quality awareness elearning completed by 4,500 colleagues as part of our wider Water Quality First programme.

Supporting colleagues when they need it most

During the year, we ran a communications campaign aimed at reminding and encouraging colleagues to maximise the value of their reward package. This included money management workshops and support with healthcare costs.

Status key

Annual performance	Against 2025 target
Met expectation/target	Confident of meeting target
Close to meeting expectation/target	Some work to do
Behind expectation/target	Target unobtainable

Assurance key

ITV	Independent third-party verification
RRA	Regulatory reporting assurance
IAT	Internal audit team

Measure	2025 target	Performance 2022/23	2021/22	2020/21	Link to assurance	Link to remuneration[2]	Link to main stakeholder	Status: Annual performance	Status: Against 2025 target
Customer ODIs[1]	£200 million cumulative	**£25 million**	£25 million	£21 million	RRA	Bonus			
Water quality customer contacts per 10,000 population[1]	12.2	**14.1**	17.9	17.7	RRA	Bonus			
Supply interruptions per property per year (hours:minutes:seconds)[1]	00:05:00	**00:38:44**	00:07:58	00:04:46	RRA	PC			
Unplanned outages of peak week production capacity[1]	2.34%	**1.73%**	2.07%	1.88%	RRA	PC			
Number of household written complaints compared to WASCs[1]	Upper quartile	**Second quartile[3]**	Second quartile	Upper quartile	RRA	Bonus			
Speed of resolution[1]	5 days	**3.9 days**	3.5 days	3.5 days	RRA				
Developer satisfaction score (D-MeX)[1]	Above industry median	Above industry median	Above industry median	Above industry median	RRA	PC			
Number of households registered for Priority Services[1]	In excess of 220,000 (7%)	**294,490 (9.1%)**	186,224 (5.9%)	128,831 (4.1%)	RRA	LTP			
Certification for Priority Services[1] [4]	Maintain certification	**ISO22458: 2022 Verification achieved**	Maintained BS18477	Maintained BS18477	ITV				
Helping customers look after water in their home[1]	10% increase	**31.60%**	23.85%	13.75%	RRA	PC			
Compliance Risk Index[1]	0.00	**3.67**	3.02	2.58	RRA	LTP			
Wellbeing Charter accreditation	Retain accreditation	**Retained**	Retained	Retained	ITV				
Accident frequency rate for colleagues (per 100,000 hours)	0.064	**0.072**	0.073	0.094	IAT				
Accident frequency rate for contractors (per 100,000 hours)	Year-on-year improvement	**0.078**	0.043	0.087	IAT				
Your Opinion Survey score for diversity and inclusion questions	Upper quartile against Utilities norm	**Upper quartile**	Upper quartile	Upper quartile	ITV				

[1] Measure relates to United Utilities Water Limited.
[2] PC = Performance commitment subject to reward and/or penalty as part of customer outcome delivery incentives (ODIs). These feed into both bonus and LTP through inclusion of customer ODIs and return on regulated equity (RoRE) respectively. Read more about the bonus and long term plan (LTP) in our Remuneration report on pages 170 to 203.
[3] Latest comparative data available 2021/22.
[4] The new Consumer Vulnerability standard, ISO 22458:2022 replaces the previous BS18477:2010 Inclusive Service Provision standard.

Our social performance in 2022/23

Developing a strong female talent pipeline

Our ambition is to have strong female representation at the top of the organisation and we want to provide our female leaders with opportunities to develop their careers at United Utilities.

We are proud to have been recognised as one of the top 15 FTSE company performers when it comes to women in leadership, having exceeded the 40 per cent target for Women on Boards and Women Leaders set by the FTSE 100 Women Leaders Review and tracking at 44 per cent and 43 per cent respectively. With Louise Beardmore becoming the first female CEO at United Utilities and Alison Goligher taking up the role of senior independent non-executive director of our board, this strengthens our female presence in key board roles.

During the year, we launched our partnership with Women on Boards, which offers services such as workshops, podcasts, CV writing support and access to non-executive vacancies. Facilitating access to these services strengthens our ambition to support female colleagues in developing into senior leadership roles.

Our chief digital officer, Heena Mistry, made the Northern Power Women 2023 Power List for her drive and passion to influence, inspire and deliver positive change. One of the 13 per cent of female senior IT leaders in the UK, Heena is proud of the diverse teams she's built while working in different cultures and situations – often being the only female or ethnic minority at the table. Heena was voted in the UKTech50 for 2022, which identifies the 50 most influential leaders in the UK tech sector. She said: "It's such a privilege to do what I love, to feel like I make a difference and be recognised for it. Our ambition to become a digital utility is more than technology; it's about working with fantastic people every day to really accelerate the value we provide to customers and to look after our environment for generations to come."

Meg Johnson (pictured below) joined our Aspiring Manager Programme in 2021 while working as a team leader and is currently in the final phase of her chartered manager degree apprenticeship at Manchester Metropolitan University. The Aspiring Manager Programme was set up to mitigate risks around hard-to-fill operational positions. Meg was recently promoted to the role of wastewater production manager; a critical role in our business and one traditionally held by male colleagues.

Delivering value for

"Our ambition is to have strong female representation at the top of the organisation."

Read more about our approach to equity, diversity and inclusion on pages 54 to 55

"We continue to develop strong relationships with those organisations and charities which provide support to customers struggling with their household bills."

Working in partnership to support more people who are struggling financially

The rising cost of living has had an impact on many households over the last year, and it's more important than ever that we support customers through this difficult period.

We've supported more than 330,000 customers with their payments in the last three years via lower tariffs, capped bills and payment matching schemes. When customers get in touch with us, our team is on the other end of the phone to offer help and do all we can to make their bills more affordable. Our online form also allows customers to apply for support via our website, making it even easier to obtain the help they need by completing a single application for all our schemes.

We know that customers are sometimes reluctant to speak to us directly about their water bills, especially if they're having payment difficulties for the first time.

So, alongside our industry-leading affordability schemes, we continue to develop strong relationships with those organisations and charities which provide support to customers struggling with their household bills. By working closely with these organisations we can ensure they recommend our affordability schemes to customers who would be eligible for financial support with their water bills.

Our outreach and engagement team is instrumental in helping us to achieve this objective, visiting local organisations to increase awareness of our schemes among those debt advisors who play a key role in helping people obtain the support they need. Our home visits are also extremely successful in targeting our support at customers who need a helping hand with their payments.

We hosted our fourth affordability summit this year, attracting more than 100 delegates and bringing together debt advisers from across the region to discuss how organisations can support them in their efforts to help people who are having difficulties making ends meet.

The more we can do to help those debt advisers who customers turn to for help when they're having money issues, the more we can continue to target our support to help them get back on track with their payments.

Delivering value for

Read more about affordability and vulnerability on page 98

Our governance performance in 2022/23

How we measure performance

Our key performance indicators for building a stronger North West are our capital programme delivery incentive, community investment, and our ratings and rankings against a range of trusted investor indices. We report on a selection of wider governance metrics of interest to stakeholders on page 109.

STRONGER

Responsible business and governance

Strategic priorities

- Spend customers' money wisely
- Contribute to our communities

Contributing to

Overview

Ensuring we are efficient and effective in our investments and delivering against our commitments and promises helps to build trust with our communities.

Our activities support thousands of jobs in the supply chain, helping to generate employment and income for the North West economy at a critical time when the country faces significant rises in the cost of living.

We have strong relationships with suppliers, helped by prompt payment and engagement through our United Supply Chain programme, and we work collaboratively with partners on common goals.

We continue to invest in North West communities as well as opening our beautiful areas of land to locals and tourists to enjoy the health and recreational benefits linked with access to nature.

We monitor our performance against a suite of investor indices and we continue to perform in the upper quartile among peers across these varied assessments.

Capital programme delivery incentive (CPDi)

Definition
Measures the extent to which we have delivered our capital projects efficiently, on time, and to the required quality standard.

Target
At least 85%

Annual performance

92.9%

We have delivered strong performance of 92.9 per cent against the new CPDi measure.

2021/22: n/a
2020/21: n/a

Status
Met expectation/target

Link to stakeholder

Link to material issue
- Customer service and operational performance
- Financial risk management
- Corporate governance and business conduct

Link to risks
- Finance
- Supply chain and programme delivery

Link to remuneration
Bonus

Link to assurance
Internal audit team

Community investment

Definition
Total community investment as measured by the Business for Social Impact (B4SI) method.

Target
Average community investment between 2020 and 2025 to be at least 10 per cent higher than the average between 2010 and 2020 of £2.56 million per annum

Annual performance

£2.88m

This year our direct community investment calculated using the B4SI method was above the £2.82 million target.

2021/22: £2.82 million
2020/21: £2.15 million

Status
Met expectation/target

Link to stakeholder

Link to material issue
- Supporting communities
- Trust, transparency and legitimacy
- Land management, access and recreation

Link to risks
- Conduct and compliance

Link to remuneration
n/a

Link to assurance
Independent third-party verification

Performance across a range of trusted investor indices

Definition
Company performance relative to water and utilities sector participants in a selection of trusted investor ESG ratings and indices.

Target
Upper quartile

Annual performance

Upper quartile

We have maintained upper quartile performance across our selection of ESG ratings and indices.

2021/22: Upper quartile
2020/21: Upper quartile

Status
Met expectation/target

Link to stakeholder

Link to material issue
- Trust, transparency and legitimacy
- Corporate governance and business conduct
- Political and regulatory environment

Link to risks
- Conduct and compliance
- Health, safety and environmental

Link to remuneration
n/a

Link to assurance
Independent third-party verification

Status key

Annual performance
- Met expectation/target
- Close to meeting expectation/target
- Behind expectation/target

Read more about our approach to materiality on pages 28 to 29 and our principal risks on pages 64 to 65

Read more about the bonus and long term plan (LTP) in our remuneration report on pages 170 to 203

Our governance performance in 2022/23

Our governance performance creates value for

Efficient and effective delivery of our capital programmes

Our capital programme performance has been measured in recent years based on time, cost, and quality. This year, we placed greater emphasis on efficiency and reducing the carbon impact of our enhancement projects. This has been achieved through the application of value engineering techniques, innovation and reviewing opportunities in our current supply chain.

We have delivered strong performance of 92.9 per cent against our new capital programme delivery incentive (CPDi) measure, surpassing the target of 85 per cent.

Community investment

This year, our direct community investment (calculated using the B4SI method) totalled £2.88 million, exceeding the £2.82 million target. This has been achieved through increased investment in environmental and community partnerships, delivery of education in schools, and the contribution of time volunteered by our colleagues across the business.

In addition to the direct community investment, we contributed to our Trust Fund to help those struggling to pay their bills, with further support available to help customers reduce their water bill to an affordable amount through our social tariff.

Performance across a range of trusted investor indices

We have participated in a range of independently assessed global ESG ratings and indices for many years to benchmark our approach against best practice and emerging sustainability challenges. Our approach to responsible business has ensured consistent upper quartile performance in selected ESG ratings and indices. After a year's absence, we have returned as a component of the Dow Jones Sustainability World Index along with just three other companies from the Multi Utilities and Water sector. In the Sustainalytics assessment, we continue to be classified as low risk and a top ten performer in the Utilities industry group. We are proud to have maintained an MSCI ESG rating of AA since 2014.

The external perspective provided by these ESG ratings is beyond the UK water sector and compares our performance against international water utilities, wider utilities and non-utility companies. We continue to respond to best practice and emerging ESG trends to maintain our performance in these ratings and we are increasing our engagement with investors on ESG matters.

Engaging with communities

Direct engagement with communities provides the opportunity to hear what customers think and to explore ways we can work together to address issues and make the North West stronger. During the year we have been to some of the busiest shopping centres in Liverpool, Manchester and Blackpool inviting customers to drop by and have a chat with our team about all things water, wastewater, billing and more.

We have been engaging communities and customers more widely on what they care about to inform our business plan for 2025–30. See our case study on page 110.

Educating children about water

Alongside our 'All about water' education sessions that inspire children on all things water, this year we have teamed up with Mad Science to engage children in Grime Scene Assemblies. The fun interactive workshops enable children to learn more about how the sewer system works – and how problems can arise when wet wipes and fatty food waste is put down the drain. Overall, 23,000 children benefited from our educational programmes over the past 12 months – exceeding our 2025 target of 20,000.

Helping schools look after water

Work to help schools and colleges become more water friendly has shown positive results. The project, run in collaboration with the Department for Education and Groundwork Greater Manchester, visited over 60 schools across the North West to undertake a water efficiency visit that included fixing leaking toilets, taps, urinals and showers. As well as repairing leaks, the project team also introduced water efficiency devices, such as save-a-flush devices, tap inserts and shower heads, to help reduce ongoing water consumption.

In total, the project fixed 368 leaks and fitted 319 water efficiency devices saving an estimated 329,000 litres per day or 5,222 litres per day per school. Over a year, each school saved enough water to fill an Olympic sized pool, saving water and saving money. We are now developing plans to offer water efficiency visits to more non-household customers across the whole of the North West as part of our plans for 2025–30.

SuDS in schools

Schools across the region have benefited from our £1 million Sustainable Drainage for Schools programme. We have funded the award-winning project with support from the Department for Education and delivered in partnership with the designer Atkins Ltd and contractor Horticon Ltd.

As part of the pilot project, schools have had sustainable drainage solutions installed on playgrounds to help harvest water and divert rainwater away from entering the sewer system. SuDS are a fantastic way to incorporate a multitude of benefits into school spaces through increased biodiversity, water quality and carbon sequestration while reducing key issues like flood risk and strain on the sewer network.

Partnership working

We invest in community partnerships to tackle issues more effectively, to find new solutions to the challenges we face, and to access new funding streams, driving efficiency and a better overall outcome. As part of our £300,000 CaST fund, we provided funding to community groups across the North West to deliver elements of our catchment management approach, focused in particular on community engagement with nature or helping shape and promote natural capital markets.

One of the projects to receive funding this year is The Land Trust's Green Angels project at Port Sunlight River Park on the Wirral. The park, a former landfill site on the banks of the River Mersey, has been the venue for free workshops, walks and bug hunts to find out what kinds of creatures call the water their home. A family summer day also brought children and adults together for mindfulness sessions, guided walks, treasure hunts and craft activities. Giving people the chance to get hands-on is not only helping the park and improving it for the wildlife, but it is also offering a great boost for their physical and mental health and providing the opportunity to learn new skills.

We have been working with communities in Oldham to improve the local environment and bring communities together. See our case study on page 111.

Working with suppliers

Suppliers play an important role in delivering our services and, alongside our colleagues, often act as the face of our business for many customers and communities. Events in recent years have shown the importance of our relationships with our supply chain partners and we want this to continue to grow as part of our United Supply Chain approach. We work constantly to improve our processes, procurement routes and overall market engagement to ensure that our core service delivers maximum value to internal stakeholders, key suppliers, our broader supply chain and ultimately, customers. Our activities support around 15,500 jobs in the supply chain, and the acceleration of around £500 million of capital expenditure into the first three years of AMP7 will continue to play a part in helping to generate jobs and income for the North West economy.

External recognition and benchmarking

United Utilities Group PLC has been included in the FTSE4Good Index Series since June 2001. Latest review December 2022.

In the annual review of July 2022 our status was assessed as Prime.[1]

We received an overall Advanced ESG score by Moody's ESG of 64/100 in year 2021 and United Utilities Group PLC has been reconfirmed as a constituent of the Euronext Vigeo UK 20 and Europe 120 indices in December 2022.[2]

As of October 2022, United Utilities Group PLC received an MSCI ESG rating of AA.[3]

For 2022, our overall performance was 81% and we are proud to be a component of the iconic Dow Jones Sustainability World Index. Effective December 2022.

In November 2022, United Utilities Group PLC received an ESG Risk Rating of 11.4 and was assessed by Sustainalytics to be at low risk of experiencing material financial impacts from ESG factors.[4]

In 2022 we achieved CDP leadership scores in both climate change (A-) and supplier engagement (A) assessments.

(1) issgovernance.com/esg/ratings/badge
(2) moodys.com/esg
(3) msci.com/notice-and-disclaimer
(4) sustainalytics.com/legal-disclaimers

Our governance performance in 2022/23

Payment practices are critical to United Utilities and our suppliers – this can be a critical time for suppliers, who are also facing significant rises in the cost of living. As a signatory to the Prompt Payment Code and in addition to the commitment to pay at least 95 per cent of invoices within 60 working days, we also continue to pay 95 per cent of our small and medium-sized enterprise (SME) suppliers within 30 days. Over the last year we have continued to outperform our target to pay suppliers promptly, with 99 per cent of our invoices paid within 60 days, and an average time to pay of 12 days. We act fairly and transparently with all our suppliers and as a signatory to the Code, comply fully with the reporting requirements.

We were awarded a 'Fast Payer Award' by Good Business Pays for the second year running. This award recognises FTSE350 companies who are fast payers of their invoices and can demonstrate that over the past 12 months they have paid their suppliers in less than 30 days as well as paying 95 per cent or more of all invoices on time. Alongside this, in March 2023 we took part in a cross-sector Industry Leaders Advisory Group with Liz Barclay, Small Business Commissioner, to discuss the importance of the Prompt Payment Code in supply chain management.

United Supply Chain

Our United Supply Chain (USC) approach plays a fundamental part in achieving our purpose. USC helps to mitigate risk, build resilience, improve compliance, assurance and ultimately deliver better value within a high quality supply chain and will help to deliver our responsible sourcing principles effectively throughout our supply chain. USC recognises suppliers as an extension of United Utilities and they are asked, as a minimum, to become a signatory to our responsible sourcing principles. For those suppliers that are integral to our operations, we encourage them to become leaders and to work jointly with us to deliver improvements across ESG areas and to improve value for customers.

Through our continued membership of the Supply Chain Sustainability School (SCSS) we can provide additional training and events to assist our suppliers in their own sustainability efforts. We have created tailored learning pathways for over 70 of our key suppliers aligned to our responsible sourcing principles and have held several sponsored workshops. We have achieved the maximum SCSS 'Gold' status in 2022, due largely in part to our continued commitment through USC.

During the year the USC approach was shortlisted for a 2022 CIPS Excellence in Procurement Award, demonstrating how it remains at the forefront of industry thought leadership on collaboration with supply partners.

Supply chain innovation

We have been leading a pilot project in partnership with Dŵr Cymru (Welsh Water), Jacobs, Severn Trent Water and International Synergies Ltd to identify opportunities for the supply and demand of reused and repurposed materials to create a new test market. Benefits include using fewer virgin materials, which in turn will help reduce emissions and ultimately pollution, lowering the environmental impact of the industry and developing a new, inclusive relationship across the sector and supply chain. For more information on United Utilities Industrial Symbiosis project see **https://waterinnovation.challenges.org/case-studies/community-creatives-championed/.**

Sustainable finance

Our sustainable finance framework allows us to raise financing based on our strong ESG credentials alongside conventional issuance. During the year we secured a £150 million loan through the framework adding to the sustainable bond issued in 2021. An allocation and impact report detailing the investments made with the proceeds of funds raised under the framework is expected to be published in July 2023.

Recognising the group's ongoing commitment to paying its fair share of tax and acting in an open and transparent manner in relation to its tax affairs, we were delighted to retain the Fair Tax Mark independent certification for a fourth consecutive year. Every year, the group pays significant contributions to the public finances on its own behalf as well as collecting and paying further amounts for our more than 5,000 strong workforce – see pages 208 to 209.

Business ethics

We aim to maintain high ethical standards of business conduct and corporate governance – those systems and processes through which our organisation is managed, controlled and held accountable. This extends to our commercial activities and we have retained the Chartered Institute for Procurement and Supply (CIPS) Corporate Ethics Mark for the fourth consecutive year. This requires all relevant commercial colleagues to undertake online training covering human rights and forced labour in supply chains; the implications, the risks and how to respond. To complete the training, participants must reach the required pass mark.

During the past year we have undertaken a gap analysis of our approach to modern slavery and human trafficking with the help of independent social enterprise Slave-Free Alliance. The objective of the analysis was to assess our modern slavery initiatives, identify good practice and main risk areas, and develop a set of recommendations for continuous improvement. The report identified several areas of best practice and highlighted areas for focus in our policies, due diligence and risk mitigation approach. We are using the recommendations to build upon our approach over the coming year. Our anti-slavery and human trafficking statement 2023 can be found on our website at **unitedutilities.com/human-rights.**

Status key

Annual performance	Against 2025 target
Met expectation/target	Confident of meeting target
Close to meeting expectation/target	Some work to do
Behind expectation/target	Target unobtainable

Assurance key

ITV	Independent third-party verification
RRA	Regulatory reporting assurance
IAT	Internal audit team

Measure	2025 target	Performance 2022/23	2021/22	2020/21	Link to assurance	Link to remuneration	Link to main Stakeholder	Status: Annual Performance	Status: Against 2025 Target
Credit rating UUW (Moody's, S&P, Fitch)[1]	A3, BBB+, A-	**A3, BBB+, A- (Stable outlook)**	A3, BBB+, A- (Stable outlook)	A3, BBB+, A- (Stable outlook)	ITV				
Maintain Sustainable Finance framework	Available/ continued issuance	**Available**	Available	Available	IAT				
Anti-bribery: percentage of identified colleagues completing required training	100%	**100%**	100%	94%	IAT				
Number of children benefiting from education materials	20,000	**23,253**	12,998	19,120	ITV				
Partnership leverage[1]	1:4	**1:4**	1:4	1:7	RRA				
Invoices paid within 60 days	At least 95%	**98.91%**	99.34%	99.55%	ITV				
Average time taken to pay invoices	<28 days	**12**	13	13	ITV				
Supplier Relationship Management score	90%	**90%**	54%	69%	IAT				
CIPS ethical mark	Retain accreditation	**Retained**	Retained	Retained	ITV				
Percentage of targeted suppliers signed up to United Supply Chain	100%	**89%**	90%	38%	IAT				
Percentage of partner and strategic suppliers that have sustainability risk assessment in place	75%	**73%**	72%	35%	IAT				
Percentage of suppliers in high risk categories (in sustainability risk assessments) covered by enhanced due diligence audits	5%	**3%**	Delivery scheduled from 2022	Delivery scheduled from 2021	IAT				
UK Corporate Governance Code	Maintain compliance	**Compliant**	Compliant	Compliant	IAT				
Fair Tax Mark	Retain accreditation	**Retained**	Retained	Retained	ITV				
Living Wage accreditation	Secure and retain	**Retained**	Retained	Secured accreditation	ITV				
Pension Quality Mark +	Retain accreditation	**Retained**	Retained	Retained	ITV				

[1] Measure relates to United Utilities Water Limited.

Our governance performance in 2022/23

Engaging with customers to inform our business plan

Engaging with customers early on in our business planning process for 2025–30 has allowed us to understand their priorities and determine the focus for AMP8 to make sure our investment and actions reflects those priorities.

Our research included over 3,000 customers from a wide range of our key customer groups, including household, business, vulnerable, low income, future and digitally-excluded customers. It provided an early view of the minimum service expectations of customers, as well as the growing priorities for environmental improvement, and affordability. It showed that 'safe water to drink' was the most important priority for all customers.

Using a range of our own research projects as well as industry and regulator research and independent consultancy, we have continued to track customer priorities over time to see how they have evolved. These findings have allowed us to prioritise investment in areas which matter most to customers, focusing on schemes which improve resilience, environmental benefits and affordability.

We carried out innovative 'immersive' research to inform the development of our options hierarchy for our Drainage and Wastewater Management Plan and our Water Resources Management Plan. A three-week 'pop-up' community, made up of customers, business users and future bill payers, gave us incredible detail into how customers view the future of water and wastewater management in the North West. The research showed customers' appetite for more education into using water responsibly, innovation and smarter ways of working before the more traditional grey measures.

All of these learnings are helping to shape our plans as we prepare for AMP8 and beyond.

Delivering value for

"Learnings from engagement have allowed us to prioritise investment in areas which matter most to customers, focusing on schemes that improve resilience, environmental benefits and affordability."

Read more about **engaging with stakeholders** on pages 56 to 57

"Partnership working creates a host of new opportunities, brings increased benefit for customers, for the land, and for the water, and ensures we're delivering the right solution in the right place."

Northern Roots partnership helps us create innovative community-led behaviour change

To deliver the best possible outcomes for customers and the wider community, we know we must work together.

Partnership working creates a host of new opportunities, brings increased benefit for customers, for the land, and for the water, and ensures we're delivering the right solution in the right place.

Our partnership with Northern Roots is an example of how we're working with organisations that are best placed to create an innovative model of community-led behaviour change that can be adopted by communities elsewhere across the UK.

Northern Roots is a project to create the UK's largest urban farm and country park on 160 acres of under-used green space in the heart of Oldham, in Greater Manchester. Developed for and with local communities, the vision for Northern Roots is to create sustainable economic, social and environmental benefits for those communities. This includes working to enhance the quality of the large volume of water that runs through the Northern Roots site and into the River Medlock.

We identified Oldham as an area with relatively poor performance in terms of sewer blockages, and sewer litter impacting the receiving environment. We partnered with Northern Roots to create a unique new project, working with local communities in Glodwick to better understand practices and behaviours linked to non-flushable items, such as wet wipes and nappies being flushed down toilets, or fats, oils and grease being poured down drains. The project used creative activities to empower local residents to take simple steps to change behaviour – which is more cost efficient and sustainable than clearing blockages or resolving the problems caused by unsafe sewer behaviour.

In-depth discussions, focus groups and personal interviews were carried out with residents, with the research highlighting a fundamental lack of awareness of what constitutes unsafe sewer behaviour. Residents emphasised the need for simple, educational communication and recommended a tailored approach to resonate with different demographics. The research has given us a baseline from which the impact of future campaigns in the area can be measured, allowing us to produce effective campaigns for sewer safety in the future.

Delivering value for

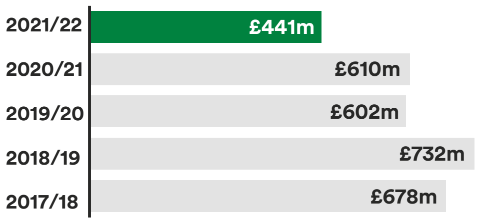
Read more about **our work in communities** on pages 106 to 107

Our financial performance in 2022/23

This has been a challenging year for the business. Revenue declined 2 per cent, mainly driven by lower than expected consumption while underlying operating profit fell 28 per cent or £169 million, primarily due to the reduction in revenue and inflationary pressures on core costs, particularly power and chemicals. The higher inflation has also significantly increased non-cash interest expense on our index-linked debt, which alongside the lower operating profit, has resulted in a small underlying loss for the year of £9 million and an underlying earnings per share of minus 1.3 pence.

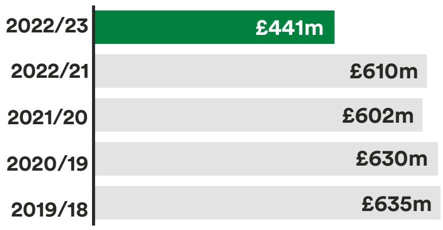
However, the inflation linkage for both the Regulatory Capital Value (RCV) and the allowance for total expenditure (totex), provides additional longer term value that is not reflected in the income statement. This has contributed to a robust economic performance, including an increase in our return on regulated equity of 11.0 per cent. This extra value accruing to the RCV has resulted in a reduction in RCV gearing to 58 per cent, consistent with our strong balance sheet and supporting our dividend policy.

Underlying operating profit[1]

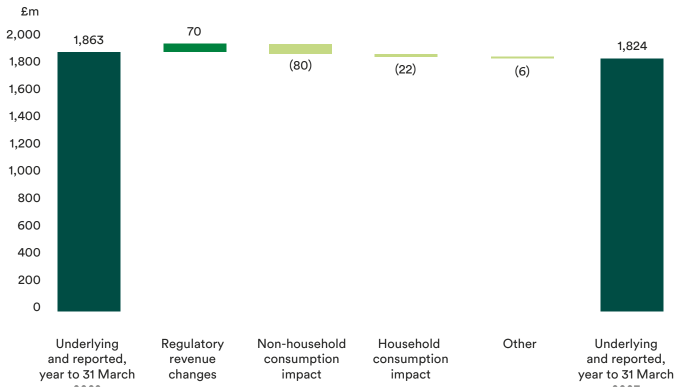


(1) A guide to APMs and a reconciliation between underlying profit and reported profit is shown on pages 118 to 119.

Reported operating profit



Revenue

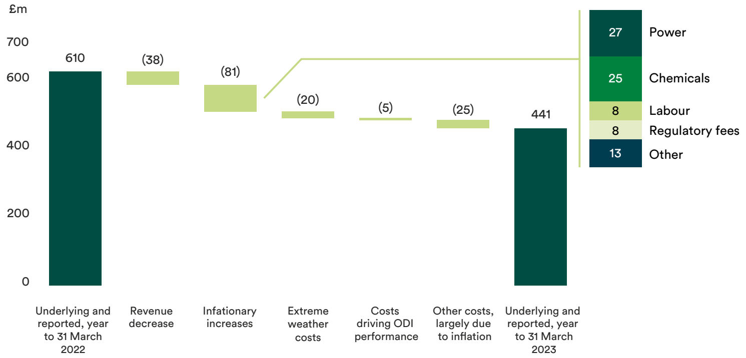


Revenue was down £38 million, at £1,824 million, largely reflecting lower consumption more than offsetting the allowed regulatory revenue increase.

In 2022/23 we had a £70 million increase in the revenue cap due to regulatory adjustments, incorporating £21 million in relation to ODI rewards earned in 2020/21 and a 4.6 per cent CPIH-linked increase partly offset by 1.3 per cent real reduction in allowed wholesale revenues as set out in our PR19 Final Determination.

Non-household revenue has decreased by £80 million compared with last year and household consumption has decreased by £22 million, as consumption across both customer groups has changed since charges and tariffs for the year were set in December 2021. Taking into consideration the regulatory adjustments, revenue for the year represents a £41 million under-recovery against allowed revenue, which, under the revenue control, will be recoverable in two years' time.

Operating profit



Operating profit at £441 million was £169 million lower than last year, largely reflecting the decrease in revenue, inflation impacting our core cost base, and the impact of operational incidents as a result of extreme weather during the year.

Inflationary pressures have impacted input costs, resulting in an £81 million increase. The largest increases have been to power, chemicals, labour costs and regulatory fees, where we have incurred an additional £27 million, £25 million, £8 million and £8 million respectively. We have experienced smaller inflationary increases to other costs of £13 million, which on a cost base of £518 million represents an inflationary impact of 3 per cent, which was less than CPIH inflation.

Our regulatory model allows for indexation of our overall totex allowance (including capital expenditure) and, with average CPIH of 8.9 per cent, we are managing to contain the inflation impact on overall costs within the totex inflation allowance.

Extreme weather events adversely impacted not only our ODI performance, but also drove an adverse operating cost impact of £20 million.

The £5 million of additional expenditure driving improvements to ODI performance was primarily in relation to infrastructure renewals expenditure (IRE) investment in Dynamic Network Management (DNM) – our innovative approach to managing our sewer network – and improving water quality.

The rising cost of living increases the strain on customers' ability to pay their bills and therefore cash collection. However, we have 81 per cent of household customers on direct debit and other payment plans and, with the help of proactive engagement, innovative solutions and tailored assistance, we have achieved our best ever performance for cash collection. This has contributed to bad debt remaining at an all time low 1.8 per cent of household revenue.

Read more about how we responded to the extreme weather on page 48

Profit/(loss) before tax

Underlying loss before tax of £34 million was compared to a £302 million underlying profit before tax last year. The £336 million difference reflects the £169 million reduction in underlying operating profit and a £169 million increase in underlying net finance expense, partly offset by a decrease in the share of losses of joint ventures of £2 million. Underlying profit before tax reflects consistently applied presentational adjustments as outlined on pages 118 to 119.

Reported profit before tax decreased by £184 million to £256 million, reflecting the £169 million decrease in reported operating profit and a £48 million increase in reported net finance expense, partly offset by a £31 million profit on disposal of our subsidiary United Utilities Renewable Energy Limited, and a decrease in the share of losses of joint ventures of £2 million.

Net finance expense

The underlying net finance expense of £475 million was £169 million higher than last year mainly due to significantly higher inflation resulting in a £520 million increase in the non-cash indexation on our debt and derivative portfolio, partly offset by higher capitalised interest of £127 million (2021/22: £53 million) and higher net pension interest income of £29 million (2021/22: £14 million).

Cash interest of £102 million was £16 million lower than last year. Cash interest excludes non-cash items mainly comprising the indexation on our debt and derivative portfolio, capitalised interest, and net pension interest income.

Reported net finance expense of £216 million was £48 million higher than last year, reflecting the £169 million increase in the underlying net finance expense, partly offset by a £123 million increase in net fair value gains on debt and derivatives (excluding interest on debt and derivatives under fair value option) from £138 million last year to £261 million this year.

Joint ventures

In the prior year we recognised a £1.8 million net share of losses from joint ventures primarily in relation to Water Plus. For the year to 31 March 2023, Water Plus's financial performance has improved to a breakeven position, and we therefore recognise neither a share of profit or loss in our income statement.

£1.8bn

revenue impacted by lower consumption, with £41 million to be recovered in 2024/25

£441m

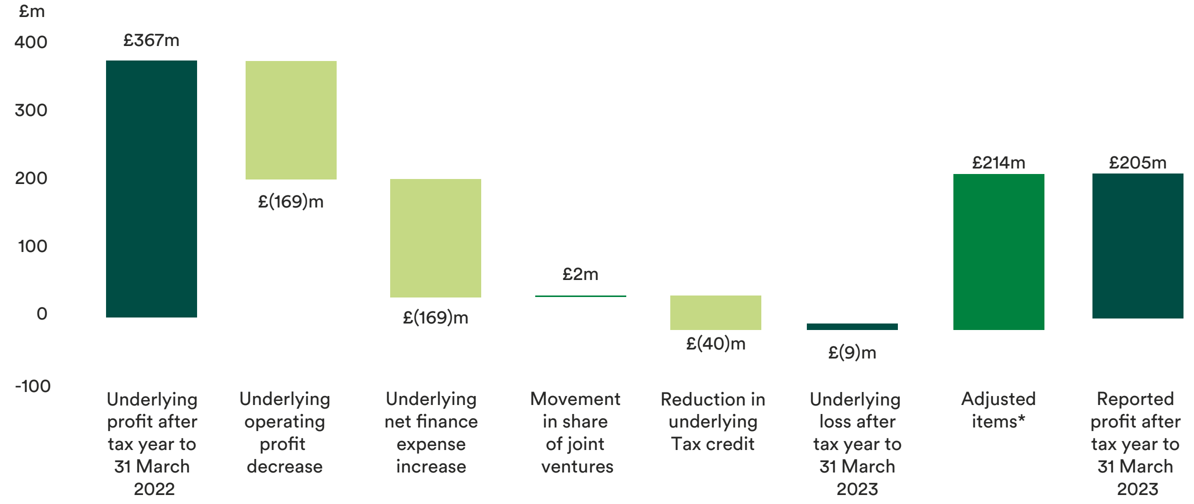
operating profit reduced due to lower revenue and inflation on core costs, particularly energy and chemicals

1.8%

bad debt as a percentage of household revenue remains stable with strong cash collection despite the rising cost of living

Our financial performance in 2022/23

Profit/(loss) after tax and earnings per share



* Adjusted items are set out on pages 118 and 119

The underlying loss after tax of £9 million is £376 million lower than the underlying profit after tax of £367 million last year, reflecting the £336 million reduction in underlying profit before tax and a £40 million reduction in underlying tax credit.

Reported profit after tax is higher at £205 million and reported earnings per share at 30.0 pence per share, with the adjusted items between underlying and reported profit after tax set out on pages 118 to 119.

Tax

The group continues to be fully committed to paying its fair share of tax and acting in an open and transparent manner in relation to its tax affairs, and we are delighted to have retained the Fair Tax Mark independent certification for a fourth year.

In addition to corporation tax, the group pays significant other contributions to the public finances on its own behalf as well as collecting and paying over further amounts for its over 5,000 strong workforce. The total payments for 2022/23 were around £229 million and included business rates, employment taxes, environmental taxes, and other regulatory service fees such as water abstraction charges.

In the current year, we received a net corporation tax repayment of £1 million which represents an effective cash tax rate of 0 per cent. The key reconciling item to the headline rate of corporation tax continues to be allowable tax deductions on capital investment, including the temporary capital allowance 'super deductions'.

The group recognised a current tax credit of £25 million due to the utilisation a prior year adjustment to recognise the utilisation of tax losses previously assumed to be carried forwards.

The deferred tax charge of £77 million is £486 million lower than last year primarily due to a £403 million charge in the prior year relating to the increase in the tax rate from 19 per cent to 25 per cent from 1 April 2023.

There are £171 million of tax adjustments recorded within other comprehensive income, primarily relating to remeasurement movements on the group's defined benefit pension schemes. As in the prior year, the rate at which the deferred tax liabilities are measured on the group's defined benefit pension scheme is 35 per cent, being the rate applicable to refunds from a trust.

Dividend per share

The Board has proposed a final dividend of 30.34 pence per ordinary share in respect of the year ended 31 March 2023. Taken together with the interim dividend of 15.17 pence per ordinary share, paid in February, this results in a total dividend per ordinary share for 2022/23 of 45.51 pence. This is an increase of 4.6 per cent compared with the dividend relating to last year, in line with the group's dividend policy of targeting a growth rate of CPIH inflation each year through to 2025. The 4.6 per cent increase is based on the CPIH element included within allowed regulated revenue for the 2022/23 financial year (i.e. the movement in CPIH between November 2020 and November 2021).

The final dividend is expected to be paid on 1 August 2023 to shareholders on the register at the close of business on 23 June 2023. The ex-dividend date is 22 June 2023. The election date for the Dividend Reinvestment Plan is 11 July 2023.

Cash flow

Net cash generated from continuing operating activities for the year to 31 March 2023 was £788 million, £146 million lower than £934 million last year, principally due to the reduced revenue of £38 million and inflationary impacts on costs of £81 million.

The net cash generated from continuing operating activities supports the dividends paid for the year of £301 million and partially funds some of the group's net capital expenditure of £690 million, with the balance being funded by net borrowings and cash and cash equivalents. This forms part of a £2.0 billion capital programme undertaken in the first three years of the period, representing 62 per cent delivery of our AMP7 programme. We have been able to deliver this expenditure effectively, scoring 92.9 per cent against our Capital Programme Delivery incentive (CPDi) measure this year.

Pensions

As at 31 March 2023, the group had an IAS 19 net pension surplus of £601 million, compared with a surplus of £1,017 million at 31 March 2022. This £416 million decrease principally reflects a decrease in the value of the schemes' assets due to changes in financial conditions over the course of the financial year, as well as experience losses resulting from actual inflation being higher than assumed at 1 April 2022. This more than offsets the significant reduction in the schemes' liabilities during the year due to an increase in the average discount rate since the start of the year and a lower long-term RPI assumption.

Further detail on pensions is provided in note 18 ('Retirement benefits') of the consolidated financial statements on page 255.

Financing

Net debt at 31 March 2023 was £8,201 million, compared with £7,570 million at 31 March 2022. This comprises gross borrowings with a carrying value of £8,435 million and net derivative liabilities hedging specific debt instruments of £106 million, net of cash and short-term deposits of £340 million.

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

Gearing, measured as group net debt (including a £76 million loan receivable from a joint venture) divided by United Utilities Water Limited's (UUW's) adjusted regulatory capital value (RCV, adjusted for actual spend, timing differences, and including the full expected value of AMP7 ex-post adjustment mechanisms) of £14.0 billion, was 58 per cent at 31 March 2023, slightly lower than the equivalent 59 per cent at 31 March 2022, and remains within our target range of 55 to 65 per cent.

Cost of debt

As at 31 March 2023, the group had approximately £3.4 billion of RPI-linked instruments and £0.5 billion of CPI or CPIH-linked instruments held as debt. Including swaps, the group has RPI-linked debt exposure of £3.3 billion at an average real rate of 1.3 per cent, and £1.2 billion of CPI or CPIH-linked debt exposure at an average real rate of minus 0.6 per cent.

A significantly higher RPI inflation charge compared with the same period last year contributed to the group's average effective interest rate of 8.0 per cent being higher than the rate of 5.1 per cent last year. More information on this can be found on page 119.

The group has fixed the interest rates on its non index-linked debt in line with its 10-year reducing balance basis at a net effective nominal interest rate of 2.2 to 2.9 per cent for the remainder of the AMP7 regulatory period.

Credit ratings

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

Debt financing

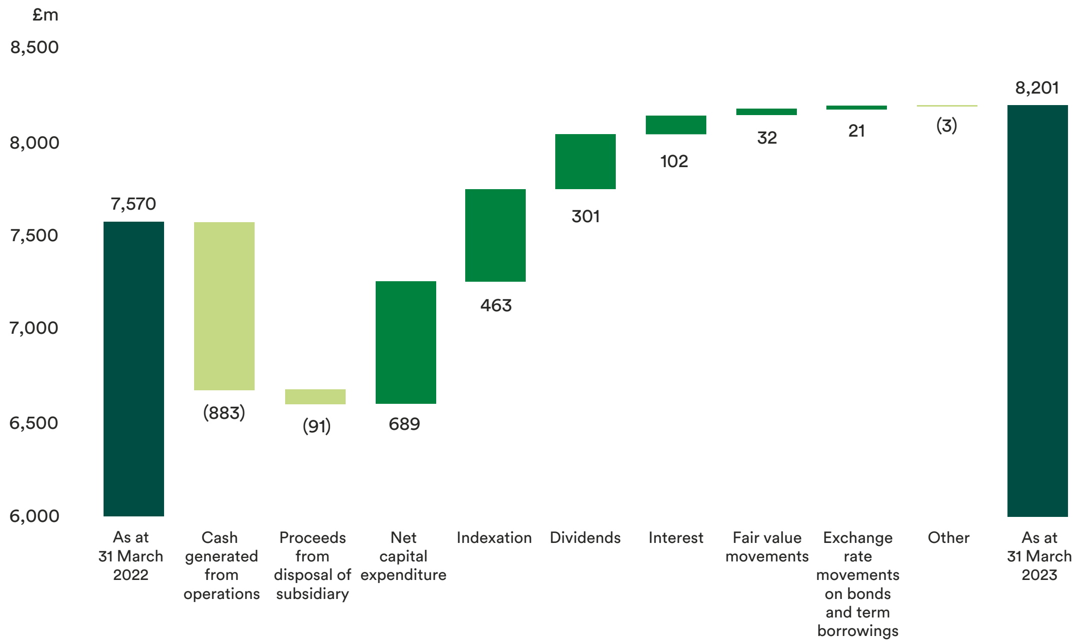
The group has access to the international debt capital markets through its £10 billion medium-term note (MTN) programme.

In total over 2020-25, we expect to raise around £2.7 billion to cover refinancing and incremental debt, supporting our five-year investment programme. So far in AMP7, we have raised around £1.8 billion, taking advantage of attractive funding opportunities available and extending our liquidity out to August 2025.

In the year to March 2023 we raised £638 million of term funding including new/renewed bank facilities.

Following the year end we issued a further £400 million of term funding, with the proceeds of a £300 million sustainable public bond being received on 6 April 2023 and executing a £100 million nine-year maturity bilateral loan with one of the group's relationship banks during April 2023.

Summary of net debt movement



Our financial performance in 2022/23

Interest rate management

Long-term sterling inflation index-linked debt provides a natural hedge to assets and earnings under the regulatory model. At 31 March 2023, approximately 40 per cent of the group's net debt was in RPI-linked form, representing around 25 per cent of UUW's regulatory capital value, with an average real interest rate of 1.3 per cent. A further 15 per cent of the group's net debt was in CPI or CPIH-linked form, representing around 9 per cent of UUW's RCV, with an average real rate of minus 0.6 per cent. The long-term nature of this funding also provides a good match to the company's long-life infrastructure assets and is a key contributor to the group's average term debt maturity profile, which is around 17 years.

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

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

Liquidity

Short-term liquidity requirements are met from the group's normal operating cash flow and its short-term bank deposits, and supported by committed but undrawn credit facilities. Our MTN programme provides further support.

At 31 March 2023, we had liquidity out to August 2025, comprising cash and short-term deposits, plus committed undrawn revolving credit facilities. This gives us flexibility in terms of when and how further debt finance is raised to help refinance maturing debt and support the delivery of our capital investment programme.

Return on Regulated Equity (RoRE)

Reported RoRE for 2022/23 was 11.0 per cent on a real, RPI/CPIH blended basis.

This comprises the base return of 4.0 per cent (including our 11 basis point fast track reward that we receive in each of the five years of the AMP), financing outperformance of 4.7 per cent, tax outperformance of 2.5 per cent, and customer ODI outperformance of 0.5 per cent, partially offset by the total expenditure (totex) impact on RoRE of minus 0.8 per cent as a result of our additional investment to improve operational and environmental performance.

Totex performance

The totex impact on RoRE of minus 0.8 per cent, largely reflects the year three impact of the additional investment we are making outside the scope of our Final Determination (FD) to improve operational and environmental performance. This includes, for example, our investment in Dynamic Network Management and investment as part of our Better Rivers programme.

Our AMP7 business plan was assessed by Ofwat as being amongst the most efficient in the sector, and our performance improvements over AMP6 meant we started AMP7 at a totex run rate that supported delivery of the stretching efficiency challenge in our FD allowance. Our totex allowance increases with inflation, which helps to mitigate some of the cost pressures experienced this year, and we continue to exploit technology and innovation to help us deliver our investment efficiently.

Customer outcome delivery incentives (ODIs)

Customer ODI outperformance of 0.5 per cent reflects a net reward of £25 million[3]. Our customer ODI performance has been strong across the board, meeting or exceeding 83 per cent of our performance commitments, our best ever performance. We continue to target a total cumulative net ODI reward over this five-year period of around £200 million.

Customer ODI rewards and penalties in AMP7 will be adjusted in revenues on a two-year lag, therefore the net reward earned this year will be reflected in an increase to revenues earned in 2024/25 through allowed increases in the rates charged to customers in that financial year, in accordance with the regulatory mechanism.

Tax outperformance

The 2.5 per cent outperformance on tax reflects the current year underlying tax credit, including capital allowances associated with temporary 'super deductions'.

Financing outperformance

We earned financing outperformance this year of 4.7 per cent. We have consistently issued debt at efficient rates that compare favourably with the industry average, thanks to our leading treasury management, clear and transparent financial risk management policies, and ability to act swiftly to access pockets of opportunity as they arise. This delivered significant financing outperformance during AMP6 and the rates we have locked-in for AMP7 compare favourably with the price review assumptions. Our financing outperformance this year has also been supported by the recent high level of inflation, which increases the benefit of the roughly £3 billion fixed rate debt we have locked in.

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

11.0%

highest ever return on regulated equity (RoRE) for 2022/23

£25m

reward for customer ODIs earned in 2022/23

AMP7 financial framework

Our five-year financial framework captures anticipated performance in the five years to 31 March 2025. This period aligns with the AMP7 regulatory period.

Investment and regulated asset growth

We expect to deliver a number of capital programmes in AMP7, in addition to our base totex programme. These include Green Recovery and the recently approved AMP8 accelerated environmental enhancement programmes. Combined with the impact of inflation, our regulated assets are expected to grow at a compound annual growth rate of 4 to 5 per cent across the five years to March 2025.

Return on regulated equity

The return on regulatory equity (RoRE) metric measures returns (after tax and interest) earned by reference to notional regulated equity. Overall returns comprise a base return on equity plus a contribution from outcome delivery incentives, operating efficiency, financing efficiency and customer service. We currently expect to deliver average returns of between 6 and 8 per cent in AMP7, on a real RPI/CPIH blended basis.

Balance sheet

The board has set a target gearing range for the AMP7 regulatory period of 55 to 65 per cent net debt to regulated capital value. As at 31 March 2023 our gearing is in the lower half of this range at 58 per cent.

Dividend policy

The group maintains a dividend policy to target a growth rate of CPIH inflation each year through to 2025. The annual increase in the dividend is based on the CPIH element included within allowed regulated revenue for the current financial year. This is calculated as using the CPIH annual rate from the November prior (i.e. the 2022/23 dividend is equal to the 2021/22 dividend indexed for the movement in CPIH between November 2020 and November 2021).

Outlook and guidance

ODI rewards

We are targeting a net customer ODI reward of around £200 million in total over AMP7.

Revenue

Revenue is expected to increase by around £150 million in 2023/24, largely reflecting the November 2022 CPIH inflation of 9.3 per cent, partially offset by a £20 million net impact of over/under-recovery during 2022/23 and 2021/22.

Underlying operating costs

Operating costs are expected to be around £60 million higher year-on-year. This increase is largely driven by inflation, with the largest inflationary pressures impacting power and labour costs. The remaining increase reflects the 2023/24 operating cost impact of additional investments, including our Better Rivers programme.

Underlying net finance expense

Underlying net finance expense is expected to be at least £150 million lower year-on-year, due to the impact of falling inflation. As at 31 March 2023, we had £4.5 billion of index-linked debt exposure, giving rise to a £45 million swing in our interest charge for every 1 per cent change in inflation. Our cash interest in 2022/23 was £102 million and we expect this to be slightly higher in 2023/24.

Underlying tax

Our current tax charge is expected to be zero in 2023/24, reflecting expected benefits following the spring budget in relation to 'full expensing' and the 50 per cent first year allowances on longer-life assets.

Capital expenditure

Capex in 2023/24 is expected to be in the range of £720 million to £800 million. In addition to our AMP7 base programme, this reflects capital expenditure for the year in relation to our additional investment (including Green Recovery, and investment supporting our Better Rivers programme), and AMP8 acceleration capital programmes.

Our financial performance in 2022/23

Guide to alternative performance measures (APMs)

The underlying profit measures in the following table represent alternative performance measures (APMs) as defined by the European Securities and Markets Authority (ESMA). These measures are linked to the group's financial performance as reported in accordance with UK-adopted international accounting standards and the requirements of the Companies Act 2006 in the group's consolidated income statement, which can be found on page 232. As such, they represent non-GAAP measures.

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

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

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

Underlying profit	**Year ended 31 March 2023 £m**	**Year ended 31 March 2022 £m**
Operating profit per published results	**440.8**	610.0
Underlying operating profit	**440.8**	610.0
Net finance expense		
Finance expense	**(262.7)**	(187.7)
Investment income	**47.0**	19.4
Net finance expense per published results	**(215.7)**	(168.3)
Adjustments:		
Fair value (gains) on debt and derivative instruments, excluding interest on derivatives and debt under fair value option	**(259.4)**	(138.0)
Underlying net finance expense	**(475.1)**	(306.3)
Share of profits/(losses) of joint ventures per published results	**–**	(1.8)
Profit on disposal of subsidiary	**31.2**	–
Adjustments:		
Profit on disposal of subsidiary	**(31.2)**	–
Underlying profit on disposal of subsidiary	**–**	–
Profit before tax per published results	**256.3**	439.9
Adjustments:		
In respect of operating profit	**–**	–
In respect of net finance expense	**(259.4)**	(138.0)
In respect of profit on disposal of subsidiary	**(31.2)**	–
Underlying (loss)/profit before tax	**(34.3)**	301.9
Profit/(Loss) after tax per published results	**204.9**	(56.8)
Adjustments:		
In respect of profit before tax	**(290.6)**	(138.0)
Deferred tax adjustment	**76.6**	562.5
Tax in respect of adjustments to underlying profit before tax	**0.4**	(0.7)
Underlying (loss)/profit after tax	**(8.7)**	367.0

Earnings per share	**£m**	**£m**
Profit/(Loss) after tax per published results (a)	**204.9**	(56.8)
Underlying (loss)/profit after tax (b)	**(8.7)**	367.0
Weighted average number of shares in issue, in millions (c)	**681.9m**	681.9m
Earnings per share per published results, in pence (a/c)	**30.0**	(8.3)
Underlying (loss)/earnings per share, in pence (b/c)	**(1.3)**	53.8
Dividend per share, in pence	**45.51p**	43.50p

Average effective interest rate

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

	Year ended 31 March 2023	**Year ended 31 March 2022**
Underlying net finance expense	**(475.1)**	(306.3)
Adjustments:		
Net pension interest income	**(28.7)**	(14.3)
Adjustment for capitalised borrowing costs	**(127.5)**	(52.7)
Net finance expense for effective interest rate (a)	**(631.3)**	(373.3)
Average notional net debt (b)	**(7,849)**	(7,368)
Average effective interest rate (a/b)	**8.0%**	5.1%