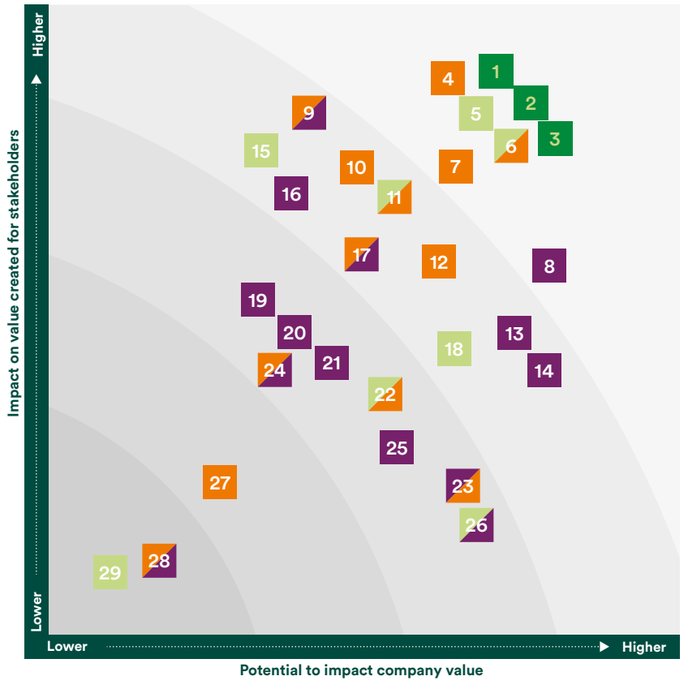
How we assess and prioritise material themes

Material themes matrix

Themes are plotted on the matrix from higher (top right) to lower (bottom left) in terms of their potential to impact company value and impact on the value we create for stakeholders.



1 Trust, transparency and legitimacy

Our comprehensive disclosures and integrated reporting approach provide leading levels of transparency throughout this report.

2 Resilience

Resilience is a key consideration in our long-term planning (page 21), the way we manage our key resources (pages 22 to 23), and the ultimate focus of our risk management approach (pages 58 to 65).

3 Political and regulatory environment

Our external environment, including the political and regulatory environment, is covered on pages 24 to 25.

Key: Our material themes are aligned to one or more of the key ambitions of our purpose – stronger, greener and healthier.

- Overarching theme
- Healthier
- Greener
- Stronger

Greener

Top material themes related to climate change are covered across the four pillars in our TCFD disclosures on pages 31 to 41

- 6 Climate change adaptation
- 15 Climate change mitigation

Other material themes related to climate change are covered in the performance section

- 26 Energy management — pages 75 to 77

Top material themes related to nature are covered across the four pillars in our TNFD disclosures on pages 41 to 49

- 5 Environmental river water quality and storm overflows
- 11 Water resources and leakage
- 18 Natural capital and biodiversity

Other material themes related to nature are covered in our water cycle, risk management and performance sections

- 22 Recycling biosolids — pages 18, 39 and 42 to 49
- 29 Waste management — page 72

Healthier

Top material themes related to customers are covered across the four pillars on pages 50 to 51

- 4 Customer service and operational performance
- 9 Affordability and vulnerability
- 10 Drinking water quality
- 12 Emerging contaminants

Other material themes related to customers are covered in the regulatory environment section

- 27 Competitive markets — page 24

Top material themes related to colleagues are covered across the four pillars on pages 52 to 54

- 7 Health, safety and wellbeing
- 17 Diverse and skilled workforce

Other material themes related to colleagues are covered in our TNFD governance pillar and performance section

- 24 Colleague engagement — pages 78 to 81
- 28 Human rights — page 46

Stronger

Top material themes related to efficiency are covered across the four pillars on page 56

- 13 Financial risk management
- 14 Corporate governance and business conduct

Other material themes related to efficiency are covered in our key resources and performance sections

- 21 Land management — page 22
- 23 Innovation — pages 23 and 85
- 25 Responsible supply chain — page 87 to 88, 139, 144 and 175

Top material themes related to communities are covered across the four pillars on page 55

- 16 Supporting communities

Other material themes related to communities are covered in our economic environment and stakeholder value creation sections

- 19 North West regional economy — page 25
- 20 Recreational land and waters — page 10

Top material themes related to cyber and data security are covered across the four pillars on page 57

- 8 Cyber and data security

How we respond to material themes: climate change

Strategic priorities related to climate — Create a greener future

Top material themes related to climate — 6 Climate change adaptation; 15 Climate change mitigation

Strategy

TCFD disclosures

a. We recognise that the climate has already changed, and we are planning for the forecasted impacts at different time horizons and under multiple climate change scenarios.

b. The most significant impacts that influence planning across all areas of the organisation are those associated with the security of water supplies and increased volumes and intensity of rain to drain.

c. We are prepared for the immediate challenges and planning for future risks of a range of climate scenarios at both regional and county levels.

Climate-related planning horizons

We plan across multiple planning horizons to protect long-term resilience and sustainability, as described on pages 20 to 21. Climate-related risks that are material in the short term are already being experienced, such as increasingly frequent high volume rainfall events. Such incidents, in turn, exacerbate existing challenges such as sewer flooding, asset flooding and asset deterioration. This is why both resilience and climate change adaptation are material themes.

Our long-term horizons look far into the future because some operational assets, such as pipes and aqueducts, have very long useful lifespans. For climate risks and opportunities, we use the same horizons for short term (one year) and long term (out to 2100); however for medium term we use 2050 to align with the Met Office UKCP18 climate change projections.

Risk assessment

In 2024, we carried out a comprehensive review of all our climate-related risks. In this review, we have evolved our understanding of climate risk by incorporating the latest climate science into our risk assessment processes. We have also taken a regional approach to assessing the effects of climate change, which has enabled us to complete a more robust risk assessment that is context specific to the five diverse counties that make up the region we operate in.

We identified 68 risks and categorised them by causal factor. We evaluated both the likelihood and consequence of each risk, for each of the five counties for the present day (short term) and for two future dates (medium and long term). For the later dates, we assessed against both a benign (2°C) and an adverse (4°C) climate scenario.

Each risk assessment rated likelihood and consequence out of five using our six capital value framework. The risk score is the product of these ratings out of 25. The output of this risk assessment can be read in Appendix E of our adaptation progress report 2024, with the causal factors and actions to address them discussed within the body of the report.

Risks with material impact

The chart below summarises the profile of the 68 identified risks across six climate-related causal factors. Each risk is coloured to indicate the maximum risk score across the five county assessments and also how the regional mean scores are expected to change over the next 25 and 75 years.

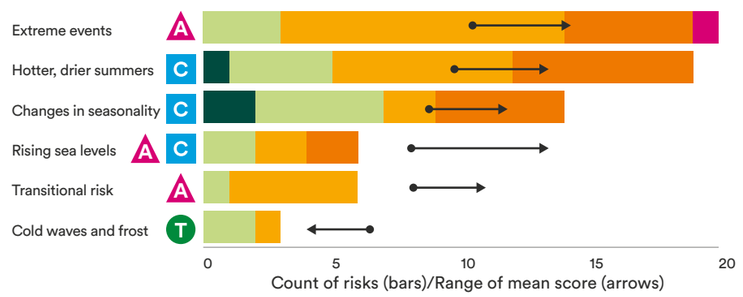
The risks assessed as having high and very high impact are all physical risks, meaning that they pose a risk to the destruction or disruption of our assets and systems. These physical risks include both acute risks, such as shocks from severe weather, chronic stresses and changes in seasonality. We are also exposed, to a lesser extent, to transitional risks associated with the move to a low-carbon economy, including policy, legal, technological, market and reputational risks.

The most material risks have a very high risk score (20 or 25) for at least one county by 2100. These four risks are:

1. Extreme events where intense rainfall overwhelms the capacity of the sewerage system and leads to flooding;
2. Extreme events where the volume of rain is beyond the capacity and asset design for the drainage network. If the use of combined sewer overflows is required to prevent sewer flooding of properties and businesses it can lead to environmental pollution;
3. Lower average summer rainfall, reducing water resource availability and necessitating greater use of supply restrictions and potential failures of the water service; and
4. Changes in seasonal weather patterns, promoting extended growing seasons which increases the likelihood and potential consequences of algal blooms.

Climate-related risks categorised by causal factor

Bar colours indicate the maximum risk score across the five county-specific assessments. Arrows show how the regional mean risk scores change between the short and the long term (adverse scenario).



	Short term 2025	Medium term 2050	Long term 2100 Benign	Long term 2100 Adverse
Extreme events	10.1	10.25	10.25	13.8
Hotter, drier summers	9.3	9.47	9.47	12.84
Changes in seasonality	8.1	8.36	8.50	11.36
Rising sea levels	8.3	10.17	10.17	13.50
Transitional risk	8.0	8.00	8.00	10.83
Cold waves and frost	6.7	6.67	6.67	3.67

Key

TCFD risk categories
- A Acute physical risks
- C Chronic physical risks
- T Transitional risks

Max score out of 25

Mean score

Short term — Long term

How we respond to material themes: climate change

How geography affects the impacts of climate-related risks

Operating in the North West presents different challenges to other places in the UK. Our region is affected by some of the wettest weather in England, which, with our higher proportion of combined sewers, puts more pressure on our network and treatment infrastructure, and results in greater risks of sewer flooding and storm overflows. Around 95 per cent of our region's supply is derived from surface water rather than groundwater or aquifers. This relationship between surface water availability and recent rainfall means we are more vulnerable to hotter, drier summers.

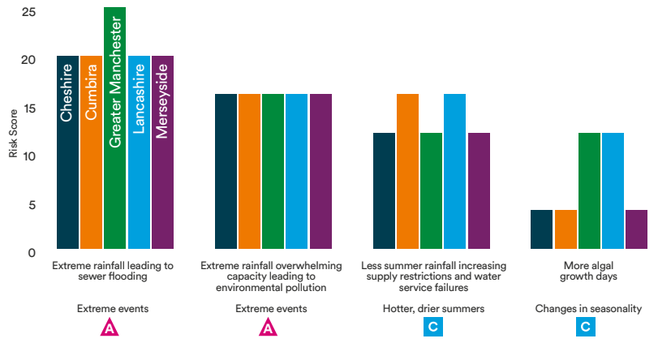
Our region is diverse and has five distinct counties. Each county has different challenges and opportunities resulting from climate change. This was recognised in our latest risk assessment, as each risk was scored at county rather than regional level. The chart to the right illustrates how the present day climate risk scores can vary markedly by county.

Greater Manchester sits within a topographical bowl, creating challenges of flooding from rivers, sewers and surface water. The flooding risk is worsened by high rainfall, especially as the urban rainfall in the North West is 40 per cent higher than the UK industry average. The flood risk is further compounded by Greater Manchester's rivers being affected by agriculture, industry, runoff from roads as well as sewage, and from the high proportion of combined sewer overflows situated in Greater Manchester.

Cumbria and Lancashire are key water resource hubs for United Utilities as they each have important surface water reservoirs. This means the operational impact of lower average rainfall in these counties is even greater than in other counties.

Algal blooms are already being observed in Lancashire and Greater Manchester, resulting in increased treatment costs and impacts on the acceptability of water with customers. While not currently a significant risk in major public water supply sources in Cumbria, due to the high proportion of raw water supplied from the county, the future risk could be significant.

Risk scores for the top four climate risks by county



How climate change affects our strategies and financial planning

In the North West we are already seeing:

- temperatures, which, as an annual average, are +1°C warmer than the pre-industrial period; and
- twice the likelihood of a hot summer, with further seasonal changes in the North West projected to be greater than the average for England and Wales, with much wetter winters and, under some scenarios, much hotter and drier summers.

This means we have to consider climate change in both our short-term operational planning and our longer-term strategic planning.

We have robust and tested operational plans to minimise disruption from unpredictable events; however, incidents can happen. How quickly and effectively we respond to these events influences the customer experience or environmental impact. Our Integrated Control Centre (ICC) is central to our response and recovery capability. The ICC provides situational awareness of how the water, wastewater and bioprocessing business streams are performing in real time. This enables a timely and coordinated response, prioritising our resources to minimise the impacts.

Our public Water Resources Management Plan (WRMP), Drainage and Wastewater Management Plan (DWMP) and long-term delivery strategy (LTDS) (part of our regulatory business plan submission) are examples of our longer-term strategic planning. In developing these plans, and seeking customer feedback on our proposals, we use a selection of future climate change scenarios and a wide range of environmental, regulatory, technological and societal possibilities. We employ advanced modelling techniques and the outputs shape our corporate and financial plans for the long term, while staying aligned with our short-term needs.

In our WRMP we detail how we are going to secure an enhanced level of drought risk resilience by 2039 – securing resilience to a one-in-500 year event. We will do this by halving leakage, improving water efficiency to 110 litres per person per day, reducing abstraction from environmentally sensitive sites and developing strategic water resource options.

In our DWMP we set out how, in the face of a growing demand, increasing urbanisation and pressures from climate change, we are going to enhance the level of environment protection and customer service – securing improved pollution and flooding performance and delivering our storm overflows discharge reduction plan by 2050. We will do this through a combination of nature-based solutions to intercept rainwater (including through increased partnership action), increasing our storm water system capacity and upgrading treatment capabilities.

Our LTDS built on our track record of effective long-term planning. It combined the WRMP and DWMP with our approach to asset management into an iterative, adaptive delivery plan, which has been certified to ISO55001:2014.

Our adaptive method, using scenario analysis, prioritises problems with evidence of impact, such as the most material climate risks, while monitoring other uncertainties. This means we can choose the appropriate timing and approach for investment as climate science and technology advances, legislation develops and our customer and stakeholder expectations evolve. This approach helped us to build an investment plan with a low and no regrets approach in the core pathway for each area, while retaining flexibility, where there is uncertainty, via the alternative pathways. See the example opposite.

Read more about water resources planning and water efficiency at **unitedutilities.com/corporate/responsibility/environment/managing-water-resources**

Read our DWMP and LTDS at **unitedutilities.com/corporate/about-us/our-future-plans**

Our strategy for delivering our GHG emissions reduction commitment and transitioning to a low-carbon economy is set out in our net zero transition plan.

Read our **net zero transition plan** on pages 34 to 36

Climate risks are business risks

Climate change and further shifts in weather patterns have the potential to significantly impact our operations, the services we provide and the broader environment. This link is evident in that five of our top ten operational risks are noticeably sensitive to climate change, even in a benign climate change scenario which is likely to keep global temperature rise below 2°C by 2100. The consequence of this direct relationship is that all of our core strategies may be affected by climate risks and opportunities.

Our resilience to climate change

Our adaptive planning includes assessment of our resilience in three climate change scenarios: no change, benign (using Representative Concentration Pathway RCP 2.6, which entails a 1.6°C increase by 2081–2100) and adverse (using RCP 8.5, which predicts a 4.3°C increase). Our capacity to adapt to the impacts of climate change and take advantage of opportunities that may arise and respond to consequences is high. This is attributed to our board and management being committed to adaptation and routinely applying a systems approach to securing resilience in the round. Resilience in the round means being resilient across all the component parts, operational, corporate and financial, and understanding the connections and interdependencies between them. This includes looking beyond our own assets to take account of cascade failure risks and interdependent services in our decision-making.

What is becoming increasingly relevant to our resilience is the impact of compound risks, where multiple risk impacts materialise within a short time frame. We are considering this through stress testing our plans using weather scenarios that combine the worst examples of weather that we have experienced. One example of this is a scenario that tests how our assets and systems would cope with consecutive hot dry summers like those of 2020 and 2021, with a dry winter like that of 1984 in between.

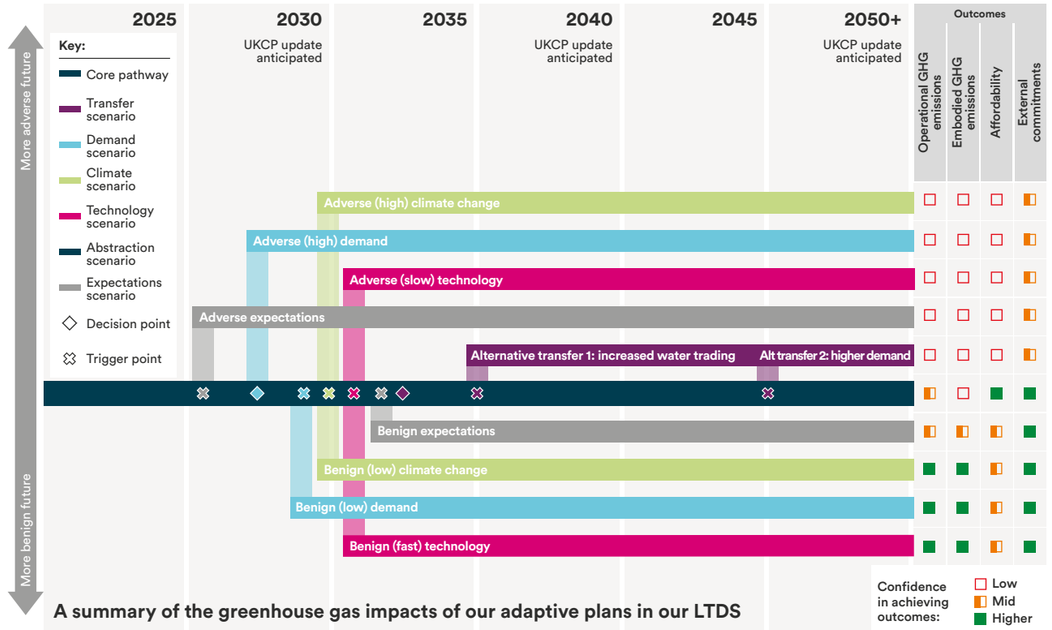
We also try to account for compound benefits, where a single intervention might have multiple benefits. For instance, sustainable drainage systems (SuDS) slow down or divert rainwater runoff, which optimises use of wastewater treatment capacity and also provides an opportunity to deliver wider social value in the community and local environment.

As well as considering physical risk scenarios, we have also estimated the likely impacts on our greenhouse gas (GHG) emissions from delivering our water, wastewater and bioresources core and adaptive plans. We have prioritised water efficiency in our business plans so that we can provide services to meet the needs of a growing population, while minimising pressure on water sources and investments and protecting rivers over the medium and long term. Consequently, our plans pose substantial growth pressures in both embodied and operational emissions. This means, to keep us on track to net zero 2050, we will need transformational innovation, more transitional investment for GHG emissions reduction and also the full valuation of GHG emissions throughout national policy frameworks.

Read more details about the impacts of climate change, and our strategies and tactics to address the climate risks, in our adaptation progress report at **unitedutilities.com/corporate/responsibility/environment/climate-change**

GHG emissions impact of alternative long-term delivery strategy (LTDS) pathways

Our adaptive plans for water, wastewater and bioresources operations each have one core pathway and multiple alternative pathways. Alternative pathways diverge at decision or trigger points at which different investment decisions would be taken in different circumstances. The impact on GHG emissions of these scenarios is illustrated below, along with the confidence in achieving key outcomes for each pathway. In the adverse scenarios, additional investment would be required to meet the water and wastewater service demands, for instance of a larger population, stringent environmental permits or peak rainfall volumes. Additional construction or chemical use, in turn, would make delivering our transition plan, in an affordable way, more difficult. Conversely, in a benign scenario for climate change, especially if with faster technological developments, our confidence in achieving our desired outcomes would be higher.



A summary of the greenhouse gas impacts of our adaptive plans in our LTDS

How we respond to material themes: climate change

Our net zero transition plan

The following pages describe how we intend to contribute to, and prepare for, a rapid global transition towards a low-emission economy. Our transition plan is ambitious and adaptive, aiming to achieve net zero (as defined by the SBTi Net-Zero Standard) across all three emissions scopes by 2050.

Our plan is based on our established climate change mitigation strategy and has four components: vision and visibility; ambition and commitment; demonstrating action; and beyond here and now. These define our principles, priorities and implementation approach. We have also drawn upon the guidance provided by GFANZ (Glasgow Financial Alliance for Net Zero) and the Transition Plan Taskforce framework.

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 are dedicated to understanding how every aspect of our operations contributes to our emissions. Our aspiration is to ensure we consider the climate in all operational and strategic decision-making, influencing strategy and behaviours by including emissions management in remuneration schemes and incorporating carbon price values into our best-value framework used for decision-making.

We have a strong track record of sustainability reporting, having obtained independent, third-party verification of our GHG inventory by Achilles Group since 2008. 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. In recent years, we have supplemented our disclosures to meet the recommendations of the TCFD and IFRS Sustainability Disclosure Standard S2.

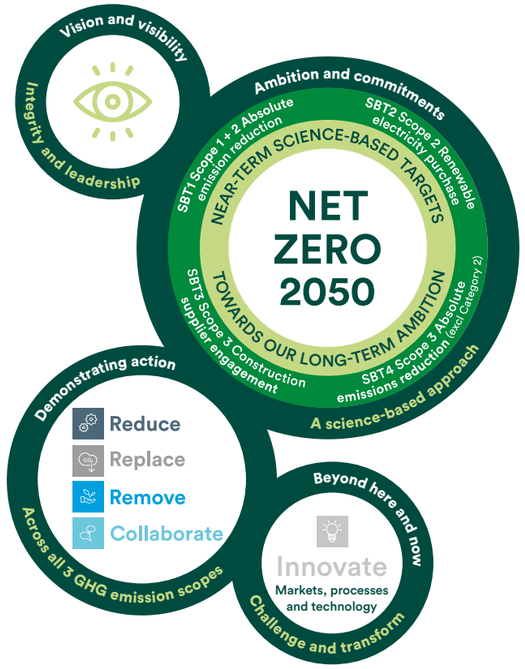
We are committed to reporting in an open and transparent way, aiming to be recognised as among the best in the UK. We use CDP as our benchmark of disclosure leadership and are honoured to have made it onto the A list for climate based on our 2024 response. We also improved our rating on the water security assessment, going from a B to an A- in our second response.

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 and we are making good progress towards delivering these. Central to our pledges was to set science-based targets for all emission scopes. The Science Based Targets initiative (SBTi) is a collaboration that defines and promotes global best practice in science-based target setting. We are proud to have been the first UK water company to have near-term targets approved by the SBTi, and, in July 2024, the SBTi approved our long-term and net zero targets as compliant with the Corporate Net-Zero Standard.

Our targets cover all three emission scopes and our emissions reduction targets are aligned with the 1.5°C ambition of the Paris Agreement. We are currently reviewing our near-term science-based targets in the context of our accepted regulatory business plan and, if needed, plan to refresh our targets in 2025.



Demonstrating action

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

Our action plan to achieve the long-term ambition of net zero by 2050 (in line with climate science and the UK Government targets) is set out on page 35.

Our implementation plan has five themes to:

- Reduce GHG emissions 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 intention is to reduce our absolute emissions through these actions before we use carbon units or purchase any credits to offset the residual emissions to net zero.

Beyond here and now

Innovating across processes, technology and culture.

Our strategy pillar of 'beyond here and now' reflects our objective to influence beyond our current emissions inventory and existing capabilities. To deliver our net zero transition plan, we will challenge standards and engage with industry peers, our supply chain, and other partners to develop markets, technologies and practices to reduce or mitigate future emissions.

We have teamed up with others in the water industry on various projects, some funded by the Ofwat Innovation Competition, exploring things such as natural coagulants for phosphorus removal and operational interventions to reduce process emissions. We co-chair the Water UK carbon network, and we have also facilitated water industry groups to understand and quantify the GHG emissions related to chemicals used and to enhance the Carbon Accounting Workbook.

An example of working with our supply chain to innovate is our Innovation Lab, a 14-week programme that provides successful applicants opportunities to test their solutions to our business challenges. Recent labs have included teams developing technology to capture methane and testing sustainable concrete incorporating graphene.

An example of evolving our practice to drive transition is in our procurement for AMP8 programme partners. All the tenders included assessments of suppliers' measurement, management and reduction of GHG emissions and favoured those with a robust and science-based approach.

Read more about how we are using innovation to tackle the sustainability challenges at **unitedutilities.com/corporate/about-us/innovation**

Ambition and external factors

Our transition plan is ambitious and adaptive, aiming to achieve net zero (as defined by the SBTi Net-Zero Standard) across all three emissions scopes by 2050. Having taken into consideration the impacts and dependencies on our resources and stakeholders, we are in no doubt of the magnitude of the challenge.

As a regulated service provider and infrastructure operator, there are elements of our transition plan that are outside of our control. Our ability and approach to net zero is ultimately determined by national policy frameworks and legislative duties, such as the new Environment Act and economic regulation. Between them, these drive both the emissions growth pressures we need to counteract and the level of investment we can allocate to emissions reductions. Our transition plan, therefore, also includes engagement activities with regulators and the Government to inform effective policy that fully values GHG emissions to support sustainable development in the round.

Action

We have intended activities over the short-, medium- and long-term horizons. Having already substantially reduced our GHG emissions through using on-site generated or purchased renewable electricity, the next actions are to minimise our use of GHG intensive energy and materials. To enable future reductions, we will engage with our supply chain and other partners to make the most of emerging markets, cultivate sustainable practice and to foster innovation to address technological gaps.

We will go beyond emissions reductions and enable, encourage and reward interventions that protect and enhance the natural environment, while promoting the value of wider ecosystem services across our sphere of influence. This will include promoting the sustainable use of natural resources, and the increased application of the waste hierarchy and circular economy principles in our operational activities and infrastructure programmes.

In spite of our best intentions, it will not be possible to eliminate emissions from the biological treatment of wastewater.

To partially compensate for this, we have projects that will remove and store carbon dioxide from the atmosphere through peatland restoration and woodland creation. We intend to use the carbon units issued as an inset against our residual GHG emissions. Units will be retired from the UK Land Registry and reported in the energy and carbon report within our annual report for the relevant financial year. In the long term, we may opt to purchase carbon credits to further offset residual emissions and achieve net zero.

Accountability

While the board has oversight of the transition plan, through the ESG committee, management have the task to design, develop, deliver and govern our net zero transition plan. This is primarily done through the director-led climate change steering group who have the technical skills and competencies to manage the setting of science-based targets, in line with standards and our strategic ambition, and effectively balance the competing environmental and social responsibilities within the financial constraints of a regulated business.

Action plan	Short term including recent progress	Medium term up to 2035	Long term to 2050 and beyond
Reduce consumption by careful use of resources.	• Reduce natural gas consumption by using biogas from wastewater • Maintain high percentage of waste to beneficial reuse • Existing energy management programme to include carbon • Use telematics to improve driver behaviour, increase fuel economy, and inform the shape of the fleet	• Optimise wastewater processes for GHG • Reduce volume of chemicals used • Sensitive delivery of substantial environment improvement programmes	• Identify and implement further efficiency opportunities • Reduce use of carbon-intensive materials and techniques
Replace processes and resources with more sustainable alternatives.	• Targeted investment in renewable energy generation capability • 60%+ sludge processing by lower emissions advanced digestion • Green fleet up to 400 electric vehicles	• Expand renewables capacity • Use natural coagulants in phosphorus removal, replacing ferric sulphate with pH correction • Bioresources investment to increase advanced digestion capacity • Fuel switching to HVO, subject to costs and supply, EVs where suitable for business continuity	• Eradicate use of fossil fuels, e.g. use hydrogen and biomethane to fuel HGVs • Nutrient-recovery initiatives • Replace processes to be more sustainable and exploit new technology and markets
Remove GHGs from the atmosphere.	• Woodland creation – successful 2025 planting season • Peatland restoration continued beyond carbon pledge	• Complete planting of 550 hectares of woodland • 1,500 hectares of additional peatland restoration activities for AMP8	• Ongoing benefits of restored peatland and growth of woodlands • Carbon capture, use and storage
Collaborate to tackle emissions in the supply chain.	• Achieved supplier engagement SBT through work with targeted capital delivery partners • Climate-related criteria used in AMP8 delivery partner selection • Agree carbon-related targets with AMP8 delivery partners	• Influence national approach to water environment improvements • Monitor sustainability of suppliers through performance indicators • Quantify more scope 3 emissions using product and activity data	• Collaborate to decarbonise our infrastructure programmes and wider supply chain • Drive standards reform to enable the use of low-emission materials and techniques • Offset residual emissions
Innovate to address current technological or market gaps.	• DESNZ LOOP project to use biogas to produce hydrogen and graphene • Establish sector funding and partnerships through Ofwat Innovation competition • Support regional transition via membership of Net Zero North West	• Explore low-carbon capital delivery options, e.g. nature-based solutions and low-carbon concrete • Process emissions monitoring • Nutrient recovery research • Research to support net zero treatment works and communities	• Transformation in water and wastewater processing towards net zero treatment works • Extraction of biopolymers from wastewater for use in the circular economy principles • Utilise emerging Environment Attribute Certificates schemes

How we respond to material themes: climate change

Net zero enhancements

Our accepted business plan for 2025–30 included specified support for three net zero enhancement schemes.

Net zero catchment strategy

Development of a net zero catchment strategy for St Cuthbert's Garden Village in Carlisle to trial ways to reduce the impact of providing services to new developments across the North West. We will work with partners to develop sustainable water and wastewater master plans. These will enable the management of surface water while minimising the need for investment in the sewer network and wastewater treatment works over the long term. This could include reusing products, local composting solutions, greywater recycling, and reducing household energy requirements.

Process emissions

Monitor release of nitrous oxide from wastewater processes at 17 sites. This enables the introduction of innovative technologies to reduce emissions through real-time control mechanisms, such as controlling aeration blowers.

Peatland restoration

Restoration of around 1,500 hectares of peatland to store carbon and deliver wider benefits. Scheme will include mechanisms to allow the benefits of the intervention to be quantified.

Decarbonising a water company's activities

Moving and treating water and wastewater are energy-intensive activities. We use electricity to power equipment such as aeration blowers in treatment works and to pump water around our network. We use natural gas and other fuels for heating, transport and to power equipment on remote sites as well as our buildings. This energy use causes significant scope 1 and 3 carbon dioxide (CO_2) emissions. We are trying to reduce the emissions from burning fossil fuel; however, switching to low-carbon alternatives like hydrotreated vegetable oil (HVO) often comes at a price premium, and has other environmental and social risks such as nature degradation and modern slavery to consider.

The biological processing of wastewater before it can be safely discharged back to the environment naturally produces nitrous oxide (N_2O) and methane (CH_4), which have global warming potentials 265 and 28 times greater than carbon dioxide (CO_2). The amounts of wastewater and sludge treated determines the estimated process emissions, so if the population increases then the emissions will increase. This means that, even if we eradicate all fossil fuel use, along with the global water industry, our scope 1 emissions would only reduce by approximately 30 per cent.

We are working with the UK water industry and the global market on monitoring projects to understand the process emissions impacts of different operational controls. The objective is to identify opportunities to reduce production or capture the gases rather than release them to the atmosphere.

Treatment of water and wastewater to increasing standards also requires use of chemicals. While this does not directly cause GHG emissions, extraction of resources, transport and production of chemicals can be energy, and therefore emissions, intensive.

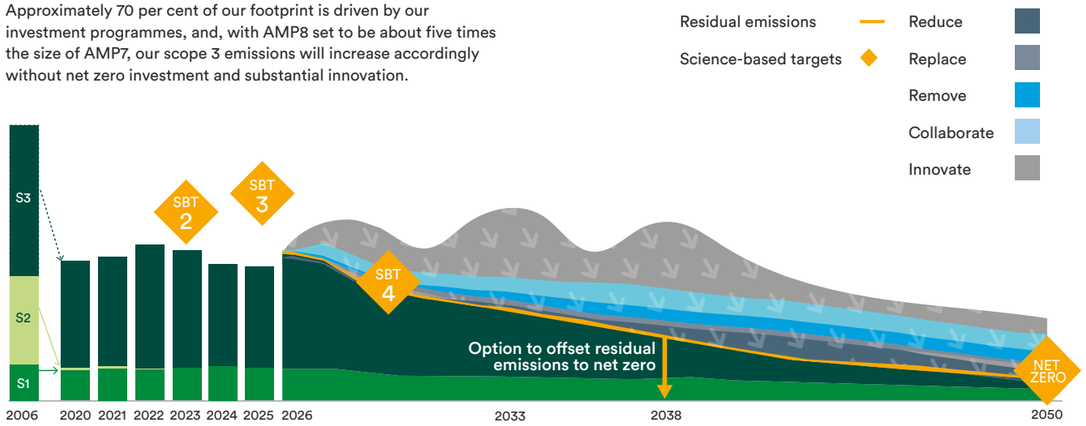
Our scope 2 emissions when calculated using the market-based method are almost zero because our electricity contracts include Renewable Energy Guarantees of Origin (REGO) certificates or we pay for certificates separately to match the electricity purchased. REGOs act as proof that the electricity is from a renewable source, but as the UK growth in green generation capacity has been slower than expected in recent years the prices have increased significantly. In the medium term we intend to increase our self-generation capacity for multi-year benefits, using our land for renewables and to maximise biogas production and heat recovery. We are reviewing our policy to obtain REGOs for 100 per cent of our purchased electricity within our energy management strategy.

Our largest source of scope 3 emissions is category 2 emissions from construction and network maintenance activities. Consequently, if our infrastructure development activity increases due to a prescribed environmental programme, as is expected for AMPs 8 and 9, then our emissions will increase accordingly. We are working to tackle this through nature-based solutions, low-carbon material replacements and standardised ways of working. In this way, we aim to contribute to the technological and market readiness needed to embed and accelerate a transition to a low GHG emissions and climate-resilient economy.

Our route to net zero

Our long-term emissions forecast illustrated below shows the scale of our emissions challenge ahead. We anticipate significant growth from the provision of services to an increasing population, investments required to adapt our assets and infrastructure for climate change and additional legal and regulatory requirements to protect the water environment. The graph below shows how we intend for this emissions growth to be addressed using the five themes of our transition plan. The depth of each layer relates to the GHG emissions that might be avoided by interventions in our action plan. Having already taken the most commercially attractive options, we know that costs, complexity and uncertainty will increase in the medium to long term. Our plan is reliant on achieving the benefits of advances made through collaboration and innovation.

Approximately 70 per cent of our footprint is driven by our investment programmes, and, with AMP8 set to be about five times the size of AMP7, our scope 3 emissions will increase accordingly without net zero investment and substantial innovation.



Governance

TCFD disclosures

a. The board and its committees, in particular the ESG committee, consider climate-related matters when reviewing and guiding strategy, approving the business plan and annual budgets and overseeing environmental performance, including science-based targets, and adaptation progress.

b. Managing climate-related risks and opportunities is fully integrated in the responsibilities of multiple principal management committees, including the ESG leadership group, climate change mitigation steering group and risk boards.

Board oversight

The climate and natural environment are critical to our purpose of "providing great water for a stronger, greener and healthier North West", which is why multiple board committees contribute to our strategic priority to create a greener future. Climate-related matters are integrated throughout the activities of our board and the principal committees.

The board has overall responsibility for United Utilities' purpose, values and strategy and approves the business plan, annual budgets and group policies. Some responsibilities are delegated to its board committees, which allows more time to probe deeply and develop a detailed understanding.

The chart below shows examples of how the board has oversight and opportunity to challenge on climate-related matters through either board committees or the CEO and executive team.

The ESG committee meets quarterly and, via the ESG leadership group, has oversight of all environmental, social and governance matters of the group. The committee plays a pivotal role in challenging and encouraging consideration of climate-related issues across the business. Topics discussed this year included whether to refresh our science-based targets in the context of final determination for AMP8, tracking progress of our carbon pledges, and endorsing the fourth climate adaptation progress report before publication in December 2024.

The audit committee considers climate in its monitoring of the effectiveness of the group's internal control and risk management systems. This includes oversight of the twice-yearly integrated review of the group risk profile. This activity considers the risk environment and, where needed, updates impact assessments of individual risks, including those identified as particularly sensitive to climate change (see page 39), and the risk of delivery of our carbon commitments. The outcome is collated by the corporate risk team on behalf of the group audit and risk board (GARB) and reviewed by the executive committee before informing the board. The impact of climate change on the assets and liabilities of the group are described within the accounting policy notes to the financial statements (see page 198).

The remuneration committee has continued to incentivise carbon performance this year by supporting a new long-term plan measure to reduce fuel-related GHG emissions.

Management role

The water industry is at the forefront of the consequences of climate change, given the intrinsic links between the weather, ecosystem health and our ability to deliver water and wastewater services; therefore, managing climate-related risk is both a strategic and everyday concern. The highest management-level position with this responsibility is our CEO.

The CEO is the key link between the board and the executive team, comprised of senior managers that report to the CEO. The executive team, through its groups and committees, is tasked with assessing and managing the climate-related risks and mitigating actions, such as ensuring the company has the necessary financial resources and skilled people in place. This often includes finding the right balance across our strategic priorities and material themes when resources are limited. An example of this is deciding how much of the biogas we produce to use generating heat in boilers, heat and electricity in CHP engines or to export to the grid.

The CEO and executive team have two scheduled meetings each month, one on day-to-day performance and a second on matters of a strategic nature, along with weekly and ad-hoc communications. Each month, the CEO delivers a report updating the board on financial and operational performance. The board's directions are then cascaded as appropriate to the management committees, such as the ESG leadership group, climate change mitigation steering group, and risk and resilience board.

Read more about **our committees including their ESG skills** on pages 112 to 114 and 121

	Group board 9 meetings per year		
Board committee		**Audit committee** 4 meetings a year	**ESG committee** 3 meetings a year
Management committees	**CEO and Executive team** >20 meetings + ad hoc	**Group audit and risk board (GARB)** 4 meetings a year **Risk and resilience board** 4 meetings a year	**ESG leadership group** 4 meetings a year **Climate change mitigation steering group** 6 to 8 meetings a year
Examples of climate-related governance mechanisms	• Operational and strategic business planning • Monitor the implementation of the business strategy • Monitor operational performance	• Govern the policies and processes for managing business dependencies, impacts, risks, and opportunities • Monitor effectiveness of internal control and risk management • Oversee reporting, audit, and verification processes • Twice-yearly integrated risk reviews • Climate-related risk review	• Development, review and guidance of ESG strategy • Oversee the setting of corporate targets • Monitor progress towards corporate targets • Oversee and guide the development of a climate transition plan

Key Oversight and challenge; Inform and implement

How we respond to material themes: climate change

Risk management

TCFD disclosures

a. The company operates a mature risk and resilience framework for the identification, assessment and management of all risks, including consideration of the additional threats and variability from climate change. We also carry out a periodic assessment of climate-specific risks.

b. We manage both physical and transitional climate-related risks in our corporate business risk profile. Five of our ten most significant operational risks are directly influenced by climate change (see page 39).

c. Managing climate-related risks is fully integrated in our overall risk management system. Climate change adaptation and mitigation are material themes (see page 30) and extreme weather/climate change is noted as a common causal theme of event-based risks.

Risk identification and assessment

Our framework for the identification, assessment and management of risks is described on pages 58 to 59. As our services are intrinsically linked to the natural environment, many of our business risks can also be considered climate risks. These include physical risks that impact our operations, assets or resources, and transitional risks associated with the transition to a low-carbon economy, such as evolving policies, regulation and legislation.

We use a variety of approaches to identify and evaluate risks, and tools such as PESTLE, to ensure coverage of the main external influencing factors. When assessing climate-related risks, and the climate sensitivity of business risks, we use complex and detailed models to understand and quantify the impacts that forecasted weather patterns will have on water resources, water quality, drainage and wastewater management. In turn, these impacts are translated into a financial risk exposure value (£) and non-financial risk category. In our calculation of risk exposure, we also recognise that some risk events may happen multiple times so we compare impacts over a long-term, typically 40-year, horizon. This also factors in where interdependencies between climate change and other demographic changes influence the frequency of events as well as the consequences.

Climate sensitivity of business risks

Following recognition of climate change as a material issue, a special review of all risks in our business risk profile was carried out in 2020 to understand the organisation's resilience to physical outcomes of climate change and the impact of transition to a low-emission economy. This work established which risks in our business risk profile are sensitive to climate change. Climate-sensitive risks were defined as those where their likelihood and/or impact would increase with climate change – for example, a weather event that currently occurs once every five years but the climate projections predict is likely to happen twice every five years.

The climate sensitivity of our business risk profiles has recently been reassessed using the latest available climate change projections from the Met Office CP18. The outcome has been shared with the board in February. In the 2025 Special Report, climate sensitivity was individually estimated for each physical risk for two climate change scenarios. The benign scenario applied the Met Office projections for different weather characteristics in the Representative Concentration Pathway (RCP) 2.6, which entails a 1.6°C increase in average global temperatures by 2081–2100. The adverse scenario uses the RCP 8.5 or a 4.3°C increase in average global temperatures by 2081–2100.

Assessment of climate risks

During the preparation of our adaptation progress report 2024, the risk assessment identified and analysed 68 climate-related risks, which were categorised into six broad categories:

- Extreme events;
- Hotter drier summers;
- Changes in seasonality;
- Rising sea levels;
- Cold waves and frost; and
- Transitional risks.

Collectively these risks represent the organisation's resilience to physical outcomes of climate change and the impact of transition to a low-emission economy. The details, including impacts for each county, are outlined in Appendix E of the adaptation progress report and summarised on page 31 of this report.

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

Managing climate-related risks

Understanding longer-term impacts through the two special reports and county-based climate risk assessment has raised the profile of climate change in risk management. This has 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.

A significant challenge to business planning and managing risks is the uncertainty and interdependencies associated with complex issues such as climate change, population growth, technology and changing needs. To address this, we are maturing our capabilities in long-term and adaptive planning, as discussed on page 33.

Our public Water Resources Management Plan (WRMP) and Drainage and Wastewater Management Plan (DWMP) are examples of where adaptive planning is used to shape our plans for the longer term (25 years and beyond), while staying aligned with our short-term needs. In these plans, we describe how we have used complex models to test the resilience of our services against a wide range of plausible and extreme future climates, alongside alternative demand scenarios defined by different demographics, economic trends and patterns of water use.

By recognising the causes and consequences, and quantifying the likelihood and the severity of impact (both financial and non-financial) should the risk event occur, we are able to prioritise risks and take proactive and early action to manage these risks. We can then adapt our strategies across key topic areas, such as water supply, leakage, sewer flooding and pollution, to improve performance and resilience.

Integration of climate-related risks into our risk management framework

Weather is fundamental to how we deliver water and wastewater services, so climate-related matters are fully integrated and firmly embedded in our overall risk management processes.

Resilience, climate change adaptation and climate mitigation are high priority material themes and extreme weather/climate change is separately identified as one of the seven common causal themes of event-based risks. Four of the twelve principal risks are climate-related risks (see pages 62 to 63) and we have an additional corporate risk for the potential event that we fail to meet our carbon commitment and liabilities.

Climate influences the financial planning across all business horizons and physical and transitional climate risks are considered in the preparation of financial statements and in the measurement bases of the assets and liabilities, such as in the valuation of the property, plant and equipment held by the group (see page 198).

By continually maturing our understanding of risk and uncertainty, we are building and maintaining long-term resilience across the corporate, financial and operational structures of the group, including the challenges of climate change. Our integrated approach, together with our multi-capital value framework, allows us to also deliver wider environmental and social value in the community and local environment, while managing business risks – for instance, by delivering green infrastructure solutions to reduce storm overflow spills instead of more traditional built assets.

Climate-sensitive business risks

The 2025 Special Report, prepared following the revised impact assessment for the 2024 adaptation progress report, described the climate sensitivity of the event-based risks in our business profile. Climate sensitivity was evaluated by applying Met Office projections for different weather characteristics at a seasonal and county level and noting where the frequency and/or impact increased over time. Eight of the 109 event-based risks were categorised as "Sensitive" to climate change and a further 20 risks were categorised as having moderate sensitivity.

All business risks undergo review at least twice a year for their current likelihood and impacts, taking into consideration the controls in place. The latest values for the "Sensitive" risks are shown in the table below alongside the relative change in risk exposure by 2050 under two climate scenarios.

* Five are in the top ten operational business risks.

Below this, we list the moderate sensitivity risks where climate change is already influencing the risk today and this impact will increase by 2050, even in a benign climate scenario.

- **C Chronic physical risk** Changing trends in weather patterns, such as temperatures, sea level and rainfall,.
- **A Acute physical risk** Severe weather events, such as storms, heat waves and floods
- **T Transitional risk** Associated with move to lower-carbon economy

Business risks categorised as "Sensitive" to climate change

Business risk		Description of climate sensitivity	2025 risk assessment: Likelihood %	2025 risk assessment: Impact Financial £m(1)	2025 risk assessment: Impact Non-financial(2)	Change by 2050: Benign scenario(3)	Change by 2050: Adverse scenario(3)
Water availability*	C	Changing seasonal rainfall patterns impact water availability and warmer temperatures intensify supply challenges in dry periods because of evapo-transpiration.			5 High	↑↑	↑↑↑
Recycling of biosolids*	C	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.			5 High	↑↑	↑↑↑
Failure of the wastewater network*	C A	More frequent and intense storms can overload the wastewater network and lead to severe sewer flooding. Urbanisation makes this worse due to quick runoff from hard surfaces.			4 Medium	↑↑	↑↑↑
Failure to treat wastewater*	A	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.			4 Medium	↑↑	↑↑↑
Combined sewer overflows*	C A	Increased rainfall, together with our significantly higher proportion of combined sewers, is highly likely to exceed the capacity of the combined sewers and lead to storm overflow activations.			5 High	↑↑	↑↑↑
Pumping stations and rising mains	C A	More frequent and intense storms will increase the likelihood and impact of failures of pumped wastewater systems leading to sewage discharge into the environment or foul flooding.			4 Medium	↑↑	↑↑
Land management	C	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.			3 Medium	↑↑	↑↑↑
Failure of above ground water and wastewater assets (flooding)	C	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.			5 High	↑↑	↑↑↑

(1) Financial impact is estimated for a 40-year period (2025–2065) and the valuation includes impacts on income, capex, opex, interest, tax, penalties, and fines and incorporates inflation. The financial impact of the climate-sensitive risks above range between £10 million and £550 million.

(2) Non-financial impact to stakeholder perception on scale of 1–8. Stakeholders include customers, regulators, investors, politicians and the media.

(3) Benign climate change scenario uses RCP 2.6. Adverse climate change scenario uses RCP 8.5.

Moderate climate sensitive risks

Business risk		Description of climate sensitivity	Business risk		Description of climate sensitivity
Carbon commitments	T	Additional obligations to meet climate-related policies, regulation and legislation.	**Power loss**	A	Greater variation in temperatures and precipitation will cause stresses and strains to the power infrastructure leading to more asset failures.
Customer experience	C	Climate change will increase frequency of events and incidents when customers suffer an actual or perceived poor experience.	**Water production capacity**	C	Hotter, drier summers will increase the likelihood of being unable to meet the required water production capacity.
Failure of wastewater assets (serious pollution)*	A	More events that exceed hydraulic capacity or strain assets will lead to more frequent pollution incidents.	**Contamination of raw water sources**	A	More frequent events and incidents that impact raw water sources such as flooding, landslides, algal bloom, and faecal and pesticide runoff.
Water efficiency	C	Hotter, drier summers will increase use of water due to changes in customer behaviour.	**Brand management**	T	Increased frequency of events and incidents that impact operational performance.

How we respond to material themes: climate change

Metrics and targets

TCFD disclosures

a. We track both physical and transitional metrics to assess climate-related risk and opportunities. We also monitor some of our environmental KPIs to form an understanding of our resilience to climate change.

b. We disclose our GHG emissions and underlying energy use for 2024/25 in our energy and carbon report on pages 75 to 77.

c. Our key climate-related targets are our six carbon pledges and our Science Based Targets. Our progress against them is summarised on page 74. Other climate-related targets and performance against them can be found on page 72.

Metrics to monitor risks

Physical metrics

As a water company, weather metrics (and forecasts) are vital inputs into our day-to-day operational planning. Rainfall volume, intensity and location directly impact the demands on water resources, wastewater and bioresources functions. To manage this, we track recent and historic patterns of weather and weather events and use the data to continually improve our understanding of how different patterns can affect demand and our ability to deliver our services. We use both short-term forecasts and longer-term projections from the Met Office, and, for our adaptive planning, consider multiple pathways and scenarios, including both a benign (RCP 2.6, <2ºC) and adverse (RCP 8.5, 4ºC) future.

An example of a physical metric that has been recorded in the past, is currently tracked, and the future values are forecasted, is peak rainfall volumes. This is the amount of rain that would be expected in a single 24-hour period in summer for a one-in-100-year event. In the 1960s for Manchester city centre this was, approximately, 93mm. The current level is over 94mm but by 2100, despite an overall reduction in average summer rainfall volumes, it is expected to range between 96mm (benign) and 112mm (adverse scenario). This means that a programme of surface water management needs to be initiated now to protect customers and the environment from the effects of sewer flooding due to the increased hydraulic risk our region is facing because of climate change.

Transitional metrics

Transitional risks result from a misalignment of economic factors with actions aimed at protecting, restoring and/or reducing negative impacts on nature. These risks are often prompted by changes in regulation and policy, legal precedent, technology, or investor sentiment. Therefore, we horizon scan for changes relating to transitional risks across all four categories identified in the TCFD guidance: policy and legal, technology, markets, and reputation.

Metrics that are particularly relevant to United Utilities include availability and price for technologies to measure and reduce process and fugitive emissions, emissions reporting obligations, price fluctuations of both fossil fuels and low-carbon alternatives and the developing market (availability and cost) of alternative fuelled vehicles. The transitional metrics that we follow closely are the proportion of the UK grid electricity generation that is from renewable sources and the costs of energy attribute certificates. As the UK renewable generation increases, the price for energy attributes certificates tends to decrease, but the likelihood of power issues due to an unstable grid increases.

Opportunities

As a regulated business, climate-related opportunities are limited to ways we can avoid costs, rather than generate revenue. For example, our strategy to increase renewable energy generation is primarily focused on reducing costs to buy electricity rather than exporting more and generating revenue.

Environmental key performance indicators (KPIs)

Management of our climate-related risks is embedded throughout our governance planning and reporting processes. We manage our climate-related risks by putting in place controls, such as those described in the 2024 adaptation progress report, and the effectiveness of these controls to limit impact is seen in our operational performance metrics. The following environmental KPIs are recognised as climate-related performance metrics and are reported on page 72 or elsewhere:

- Leakage reduction;
- Per capita consumption;
- Flooding incidents;
- Storm overflow activations;
- Risk of severe restrictions in a drought;
- Sewer collapses;
- Water service supply and resilience; and
- Low water pressure areas.

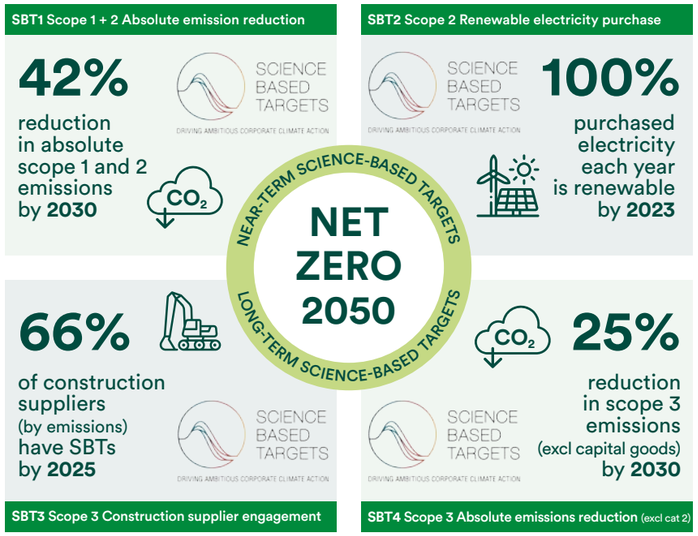
Performance and remuneration

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.

Annual bonuses for all colleagues are linked to the company scorecard (see pages 147 and 151) and up to half is based on measures linked to reducing pollution, spills, or other aspects of environmental performance, which are often climate related. Furthermore, since 2022, the long-term incentive plans for senior leaders and executive directors have include a carbon measure worth 10 per cent.

Internal carbon pricing

Carbon prices can be a useful tool to assign a monetary value to carbon emissions. We use pricing in a variety of ways for different purposes. We use a shadow price mechanism in our risk assessments to quantify a range of financial impacts for if we fail to meet our carbon commitments. We use the UK Government "Carbon values for use in policy appraisal", choosing a value for the relevant year and applying it to emissions above the committed level. We also include the potential penalty costs from failing to meet our regulatory performance commitment targets in this assessment. This price is from the UK Government carbon values and is set at £188 per tCO_2e, which is 70 per cent of the central 2027 value.



In addition to the above, we use internal carbon prices to assess the financial implications of carbon emissions on operations and for future investments. Prices for REGO certificates are an implicit price that is the cost to reduce scope 2 market- based emissions. We used a shadow price to evaluate business cases for switching to HVO, a lower emissions fuel, and ways to design out emissions from construction activities such as no-dig techniques, low-carbon concrete, and air pigging – a world first when it was used in the Vyrnwy Aqueduct Modernisation Programme.

Performance measures and targets

Science-based emissions targets

Our ambition and commitments are based on international guidance and climate science. Our four near-term science-based targets (see illustration on page 40) were verified by the Science Based Targets initiative (SBTi) in July 2021. Our long-term and net zero targets have been validated against the SBTi Net Zero Standard launched in late 2021.

SBTi mandates a target review, at minimum, every five years to ensure consistency with the latest criteria. Targets should also be recalculated and revalidated when significant changes occur that could compromise the existing target. With this in mind, we are currently reviewing our near-term science-based targets, having achieved our supplier engagement target, so that they align with our business plan and new regulatory operational GHG emissions performance commitments. It is expected this will entail changing our scope 2 accounting approach from market-based to location-based so that both SBTi and regulatory targets use the same method.

New regulatory targets

Looking forward to AMP8, Ofwat has introduced two common performance commitments related to operational GHG emissions for water activities and wastewater activities, respectively. These targets include scope 1 and 2 emissions in their entirety and some scope 3 emissions and can attract a penalty or reward of £188/tCO_2e depending on performance.

We have also been successful in agreeing a bespoke performance commitment designed to measure, manage, and reduce the embodied GHG emissions arising from 57 construction projects in our AMP8 WINEP wastewater treatment, non-infrastructure programme. Reward is possible if we reduced emissions by more than 5 per cent from the baseline.

The carbon price used for the common and bespoke performance commitments are 70 per cent and 35 per cent, respectively, of the 2027 Central scenarios UK Government carbon values 'for use in policy appraisal'.

Long-term incentive plans (LTP)

The first carbon LTP covers the three-year period that ended 31 March 2025 and had targets linked to four of our six carbon pledges. The performance and outcome of this LTP is outlined on page 161.

The second LTP, for the period 2023–26, incentivises increasing the percentage of energy used from low-carbon sources. The most recent LTP for 2024–27, approved by the remuneration committee after final determination, is a target to reduce fuel-related emissions. It is intended that, moving forward, the three concurrent LTPs will include an emissions target, an energy-related target, and one that enables delivery of our net zero transition plan.

Read about **progress against our six carbon pledges** on page 74

Read our **energy and carbon report,** including the 2024/25 greenhouse gas emissions inventory, on pages 75 to 77

General disclosure requirements of the TNFD

We manage and maintain over 56,000 hectares of land across the North West, and our operational activities are highly dependent on the natural environment, so we must consider nature in our decision-making. We are committed to transparency in our reporting and have reported on our relationship with nature since 2022 via the Task Force on Nature-related Financial Disclosures (TNFD). The TNFD framework recommendations include six general requirements that apply to all four pillars of recommended disclosures: strategy, governance, risk and impact management, and metrics and targets.

A Application of materiality

Page 29 sets out our materiality assessment for disclosures, which includes nature and climate-related themes. The materiality of nature-related matters reflects the impact on the environment through direct operations and activities across the value chain.

B Scope of disclosures

Our disclosure covers activities and assets, impacted and dependent on by our direct operations; upstream value chain (e.g. materials and construction); and downstream value chain (e.g. water use and customer behaviour).

C Location of nature-related issues

Our direct operations impact and are dependent on the extent and condition of land across the North West, including but not limited to, the 56,000 hectares of land that we own.

D Integration with other sustainability-related disclosures

Our annual report has included climate-related financial disclosures (TCFD) since 2020, and we were an early adopter of nature-related financial disclosures (TNFD) in 2022. We report on nature loss in the World Economic Forum (WEF) risk index. We also report on both climate and water in our annual CDP response.

E Time horizons considered

As set out on pages 20 to 21, we plan over short-, medium- and long-term horizons:

Short term – up to one year

Medium term – up to 2035

Long term – beyond 2035, typically to 2050, 2080 or 2100

F Engagement of stakeholders on nature-related issues

We engage with customers to inform our decisions, with environmental issues at the heart of our business planning research. Our five counties model has a key focus on stakeholder management, to strengthen relationships with local community groups in order to help us meet their needs.

How we respond to material themes: nature

Strategic priorities related to nature

- Improve our rivers
- Create a greener future

Top material themes related to nature

- 5 Environmental river water quality and storm overflows
- 11 Water resources and leakage
- 18 Natural capital and biodiversity

Strategy

TNFD disclosures

a. We have identified our most material nature-related matters across all biomes. Our strategies are built to consider nature over the short, medium and long term.

b. Nature-related dependencies, impacts, risks and opportunities are considered when developing our strategic plans and inform our investment decisions.

c. Our long-term adaptive plans support investment in the resilience of the ecosystems we impact and depend on.

d. Our direct operations, upstream and downstream value chains are within the UK.

Identifying our nature-related dependencies, impacts, risks and opportunities

Protecting and enhancing the natural environment is at the heart of our purpose and strategy. Providing great water for a greener North West means we aim to protect and enhance the natural environment and adapt to the challenges of climate change, allowing people, wildlife and nature to thrive. Our strategic priorities to 'create a greener future' and 'improve our rivers' drive us to go above and beyond our regulatory requirements to maximise value for the environment. We aim to protect and enhance the natural environment by investing in our assets, driving performance improvements, adopting best practice in asset management, and investing in nature-based solutions.

Our environmental policy is underpinned by a framework of strategies and long-term plans in response to nature-related risks and opportunities. We are highly dependent on nature, with potential for material positive and negative impacts. We manage nature-related impacts and dependencies by creating long-term adaptive plans that support investment in the resilience of the ecosystems we depend on. Through adaptive planning, horizon scanning and natural capital accounting, we have identified the most material nature-related impacts and dependencies in our direct operations, upstream and downstream from our value chains.

Biome	We depend/rely on it	We can impact on it
Freshwater	• To source clean water from reservoirs, rivers, and boreholes, from which abstraction licences permit us to take water to be treated and supplied to customers. • To receive cleaned wastewater back into the environment.	• By improving the condition of rivers and water bodies. • Through our abstractions, final effluent quality, overflows, pollution incidents, and asset failure. • By cleaning our waterways through our River Rangers and volunteer activities.
Land	• To store and clean sources of water. • To recycle biosolids, to host engineered or nature-based interventions, and to attenuate water flows. • To provide resources, such as chemicals, cement, metals and energy.	• By improving the condition of the land we are stewards of, including improving habitat health and biodiversity. • By storing greenhouse gases (GHGs) in our land, e.g. soils, peatland, and woodland.
Atmosphere	• To provide a healthy and safe work environment. • For temperature regulation. • To reduce our fossil fuel consumption through wind power.	• By restoring habitats that sequester carbon, such as peatland and woodland. • By releasing GHG emissions, and other atmospheric pollutants, thereby contributing to climate change and impacting the health of people and nature.

Biome	Material risks	Risk key: A Physical Acute · C Physical Chronic · T Transitional
Physical		
Freshwater	A	• Lack of ecosystem resilience, leading to damage to assets and infrastructure from adverse climate-related events.
	C	• Reduced raw water quality, leading to increased treatment burden. • Runoff from agriculture, leading to increased difficulty of meeting river water quality targets. • Reduced raw water availability, leading to more frequent drought risk.
Land	A	• Fire events in the catchment, leading to catastrophic impact on peatlands and water quality.
	C	• Reduced natural flood management, leading to more engineered interventions or more instances of flooding. • Increase in invasive non-native species, leading to reduced ecosystem resilience and impact on water treatment and flood management. • Landscape change, leading to reduced ecosystem resilience and impact on water treatment and flood management. • Increased risk of landslides, leading to disruption at our operational sites. • Biodiversity loss and nature degradation.
Atmosphere	C	• Reduced air quality ecosystem regulation, leading to worse impacts on customers, colleagues and society from our operations. • Reduced wind ecosystem regulation, leading to physical impacts at our sites or infrastructure.
Transitional	T	
• Increasing pace of change towards a nature-positive economy, leading to difficulty in attracting finance. • Evolving expectations and requirements on reporting, leading to additional resources needed. • Existing technology not fit for requirements or out-paces natural replacement rates, leading to additional investment requirements. • Changes in statutory compliance, leading to additional requirements such as biodiversity net gain.		

Material opportunities	
Sustainable and efficient use of resources	• Adoption of nature-based solutions such as sustainable drainage systems (SuDS), catchment interventions, and natural flood management. • Application of circular economy principles to design out waste, circulate products and materials, and regenerate nature. • Investment prioritisation through a value-based approach, which maximises value to customers, society and the environment at an efficient cost. • Transition to processes with lower negative impacts on nature and/or increased positive impacts on nature, including reducing resource extraction.
Markets	• Delivery of broader impacts through partnership working and collaborative approaches, such as the Integrated Water Management Plan in Greater Manchester. • Access to new and emerging markets, such as renewable and carbon/biodiversity markets.
Capital flow and financing	• Access to nature-related green and sustainability funds, bonds or loans, for example through our sustainable finance framework. • Use of financial incentives for suppliers to improve nature and ecosystem management. • Improved performance against regulatory objectives.
Social capital and trust	• Building trust with stakeholders through partnerships where different organisations come together to deliver shared outcomes. • Actions that create positive changes in sentiment towards United Utilities due to impacts on environmental assets and ecosystem services that have impacts on society.
Ecosystem protection, restoration, and regeneration	• Direct and indirect restoration, conservation or protection of ecosystems or habitats. For example, improving peatland, woodland and other Sites of Special Scientific Interest (SSSIs). • Protection and conservation of native threatened species and management of invasive non-native species. • Investment in blue-green and traditional infrastructure for nature-positive outcomes. • Enhancing biodiversity and strengthening the presence of nature in an urban setting, through rainwater management.

Integrating nature in our business planning activities

Natural capital accounting

Understanding the socioeconomic benefits nature provides is a valuable tool for our strategic planning and informs our long-term investment decisions. We have embedded a value-based decision-making approach and incorporate environmental metrics throughout our direct operations and value chains. We use natural capital accounting to understand the extent of our natural assets. In our latest account, the ecosystem services modelled were valued at over £4.5 billion in total, this is a combined benefit for us, our tenants, and wider society. The findings from our natural capital account highlight the importance of understanding our relationship with nature and benefits we all utilise, such as carbon reduction, climate regulation, and cultural services. We own and maintain over 56,000 hectares of land; most of this is open to the public, providing significant benefit to communities by providing natural open spaces for access, recreation, and tourism. Our natural capital account valued those benefits at £2.3 billion, modelled over 60 years.

With over 83 per cent of our land within water catchments areas and over 75 per cent of our land under a form of statutory designation, we have a responsibility as stewards to make investment decisions based on the benefits and impacts our operations have on the nature and the value we can create for customers, society and the environment.

Biodiversity and invasive non-native species

All new developments in our capital programme requiring planning permission must deliver a 10 per cent uplift on biodiversity. To achieve this, we are applying the biodiversity gain hierarchy prioritising the delivery through the creation and buying of on-site and off-site units. We are also prioritising how we can conserve and enhance biodiversity across our business for inclusion in the AMP8 biodiversity performance commitment.

After loss and destruction of habitat, invasive non-native species (INNS) are considered the second biggest threat to biodiversity worldwide. Invasive non-native species are known to pose a risk to the ability to provide safe drinking water and return treated wastewater safely back to the environment. As part of our role in helping to prevent the spread and mitigate the impacts of INNS, we have proactive biosecurity processes in place across our operations. It is important that the presence of harmful species on our land is reported appropriately to understand the extent of the spread, education and training is, therefore, a key part of our strategy. We engage with the other UK water companies to share knowledge and lessons learnt regarding biosecurity and the management of INNS, incorporating best practice approaches into our land management strategy.

Investing towards a greener North West

Our plan aims to protect and grow the value we deliver to the environment, driving value with wide-ranging social and environmental benefits. Our largest-ever investment programme was developed through prioritising value-based decision-making and long-term adaptive planning.

Investing in the North West:

- Storm overflows – £2.4 billion to further reduce spills from storm overflows.
- Carbon enhancement peatland restoration – £20 million investment to restore 1,500 hectares of peatland benefiting net zero, biodiversity, water quality and resilience.
- Rainwater management – £224 million through the advanced WINEP programme in Greater Manchester, and an additional £49 million allowance to support climate change resilience.
- Windermere – We are proposing to spend £200 million to further protect water quality by improving wastewater treatment at a number of our treatment works around Windermere.

Upstream value chain

We collaborate with our supply chain through our United Supply Chain approach, underpinned by our responsible sourcing principles (RSP) which set out our ambitions across a range of environmental, social and governance matters. As a signatory to our RSP, suppliers commit to developing their own supply chain by sharing resources, training, and up-skilling their colleagues, while working with United Utilities to assure this approach by identifying and mitigating risk. As a leader against our RSP, suppliers commit to go further by demonstrating their commitment to the principles, collaborating with us in improving practice and identifying new ways of working to enhance the value delivered to customers.

To embed our responsible sourcing principles within our procurement processes, we have worked with our external partner Supply Chain Sustainability School to create pre-qualification and invitation to tender questions specific to each principle. These questions will be identified following a sustainability risk assessment, which is undertaken as part of the strategy development. We use this mechanism to mitigate and manage ESG-related risks within the procurement processes and post contract award, building the principles into our supplier relationship activities. Our tier one suppliers are primarily based in the UK; we are working towards engaging directly with our suppliers to understand our full value chain and trace products to their source location where we can then evaluate the impacts and dependencies on the environment.

How we respond to material themes: nature

Downstream value chain

We have many schemes and strategies in place to support customers in considering their water use at home or at work, helping to reduce the demand for abstraction. Blockages in the wastewater network are identified as a key risk from our downstream value chain. Flushed products, such as wet wipes, and cooking fats, oils and grease poured into drains build up in sewers causing significant blockages. These blockages can lead to sewer flooding in homes and local communities and pollution in the environment. To reduce the number of blockages in the sewer network, we have delivered a programme of campaign activity to raise awareness of the impact of flushing products and pouring cooking fats and oils down the drain. Our 'Stop the Block!' campaign regularly runs adverts on radio, digital TV, social media channels, ITV weather sponsorship and our fleet vehicles.

We also deliver hotspot campaigns targeting areas in our region with a high incidence of blockages; campaign activity includes social media, leaflet drops, primary school educational sessions and community events.

Resilience of our strategy to nature-related risks

Adaptive planning

Future proofing our water and wastewater service is critical to supporting economic growth and prosperity for the region. We have been developing long-term adaptive plans that are agile in responding to changes in climate science, customer behaviour, and regulatory challenges. Reviewing our risks and reporting progress against our actions along with embedding our improved county risk assessments into our long-term planning decisions and future business plans is the next step to securing a stronger, greener and healthier North West.

Transitioning to a nature-positive economy

The environment is a fundamental consideration in our long-term business planning and decision-making. We are committed to doing our part to achieve the Global Biodiversity Framework targets of reducing biodiversity loss and restoring degraded ecosystems by 2030. We are investing in nature through our Water Industry National Environment Plan (WINEP), SSSI enhancement schemes, nature-based solutions, and peatland restoration projects.

Scenario planning

We are dependent on nature's capability to regulate water, for example slowing the natural flow of water, flood mitigation, providing reliable and clean water for us to treat and supply to our customers. Scenario planning helps us prepare for the uncertainty of changes in the state of nature, modelling future scenarios demonstrating different levels of resilience informs our long-term strategies and adaptive plans. The two scenarios we have chosen to assess are: a future where nature is depleted beyond acceptable levels, and a future where nature is restored and resilient to climate change. Here, we model the physical risks associated with ecosystem service degradation and the potential impact on our services.

Degraded impermeable future

Scenario description

The destruction of nature caused by deforestation, land use change, urbanisation, and over exploitation of natural resources has led to landscapes with poor water regulating capacity. The environment is dry, arid and unable to cope with rain where it falls, causing fast-flowing water and flooding events. The inability of the land to retain water results in significant changes in water availability in the environment, increasing the likelihood of drought conditions.

Impact on our service

In this scenario, there would be higher costs associated with sourcing and distributing potable water. This increases the need to implement short-term solutions such as water rationing and emergency water imports from other regions. As a result of water shortages and disruptions, customers could become increasingly dissatisfied with the service we provide. Interruptions in water available for use (WAFU) can lead to financial penalties and increased regulatory scrutiny.

When the environment is unable to mitigate heavy rainfall, our assets are at risk, which can also lead to service disruptions and increased costs. If the flood levels reach a certain depth, there is a risk of contamination of water assets, pollution events and access issues, posing a risk to public health and requiring extensive clean-up and treatment efforts.

Our response

Our Water Resources Management Plan 2024 (WRMP24) delivers a one-in-500-year drought resilience by 2039, incorporating the impacts of climate change on water availability. We are also developing strategic water resource options and reducing abstractions from environmentally sensitive sites. The WRMP24 plans to meet all individual targets included in the Environmental Improvement Plan, including those relating to business demand.

Our Drainage and Wastewater Management Plan (DWMP) integrates risk assessments, infrastructure resilience, climate change adaptation, and emergency preparedness, to help create a more resilient and adaptive future capable of managing the challenges posed by flooding. Across both the water and wastewater sides of our business, we are investing in rainwater management at key sites. Nature can support our resilience to extreme weather, for example, by investing in upland restoration, or urban sustainable drainage.

Resilient nature future

Scenario description

Nature is protected, restored and prospering as a result of nature-positive economic changes. Rivers are restored to their natural meandering state with leaky dams installed to help slow the flow of water downstream. Water catchments are healthy and spongy, slowing the flow of water through the landscape. Vegetation is diverse and tree planting initiatives have increased flood resilience across various habitats. Nature-based solutions such as SuDS are pervasive across urban and rural settings, delivering multiple benefits, including flood resilience and access to green space.

Impact on our service

When water management strategies are effective in conserving water, there is consistent and reliable access to raw water sources, posing minimal environmental impact. In a sustainable water future, there is a positive societal behavioural change towards water conservation and management. The improved water-regulating capability of landscapes helps keep rainwater where it lands, topping up ground water levels and avoiding overloading the North West's combined sewer systems, reducing the use of storm water overflows. The mitigating impact that nature has on the effects of climate change will support our services in being resilient, reducing costs associated with incident response.

Our response

Since 2005, we have taken a sustainable catchment management-based approach to water-quality improvement, working in partnership with government, NGOs and other stakeholders with the aim of protecting and enhancing the water environment through managing the surrounding land. We are managing land across the North West strategically, to improve raw water quality and tackle pollution at the source, improving the quality in lakes and rivers.

Our AMP8 investment programme adopts a wide range of approaches to improve our service while enhancing the resilience of the environment to climate change. We are delivering these improvements through a combination of grey and blue/green solutions such as asset health improvement, nature-based solutions, nature restoration, catchment management, and sustainable drainage system approaches – working to manage rain where it falls, reducing the impact of increased rainfall, and reducing the likelihood of flooding.

Spotlight on: environmental water quality and storm overflows

Taking action on storm overflows

Improving rivers across the North West is one of our strategic priorities, and we are targeting an industry-leading reduction in spills from storm overflows.

The North West's wastewater network has 54 per cent combined sewers, meaning they receive a mix of sewage and rain. In some areas, like Merseyside, the network can be more than 80 per cent combined. This compares with the industry average of 33 per cent. We also have 40 per cent higher urban rainfall than the average for England and Wales, so considerably more surface water runs off into our sewers.

This mix of rainwater and sewage goes through our wastewater treatment works, and treated water is returned to the natural environment. If the flow exceeds the capacity of the works, it is stored in tanks until the incoming flows have returned to normal levels, and then the tanks are emptied and the water is treated.

When rainfall is very heavy and the tanks fill to capacity, storm overflows activate allowing the excess rainwater and heavily diluted sewage to enter a separate pipe, which flows into a river or the sea. These have been an important part of the sewerage network for over 150 years, not just in the UK but the rest of Europe and across the world. They act as a safety valve to protect homes, businesses and land from pollution events. However, this can affect river and bathing water quality, and it needs to change.

With climate change bringing more extreme rainfall events, and significant population growth expected over the next 25 years, our wastewater network will be receiving more sewage and rainwater and, if investment needs were not addressed, the use of storm overflows would increase.

The legacy infrastructure in the North West means we have significantly more storm overflows than the industry average to tackle, and the significant change that is needed will not happen overnight. We are committed to driving a step change, and have a long-term investment plan that will increase capacity and transform the region's sewer system, reducing the need to use storm overflows and creating new ways of storing and dealing with excess water at times of heavy rainfall.

We have set up a storm overflow taskforce dedicated to reducing both the number of spills and their duration. We are increasing storage with new and bigger storm tanks, increasing treatment capacity, and looking at innovative ways to reduce the amount of rainwater entering our sewers. We have also increased monitoring, with every overflow monitored and visible on a live public portal.

Recognising the scale of the work that is needed and the importance of this to many stakeholders, we accelerated investment at high-priority sites and we are already seeing the benefits of this.

In 2024, despite experiencing periods of intense heavy rainfall, we have seen almost 20,000 fewer spills and a reduction in the duration of about 31 per cent compared with 2023. The average number of spills from storm overflows is down 39 per cent compared with 2020.

This is really strong progress, but there remains a lot of work to be done. Our final determination approved the largest AMP8 investment in storm overflows of any company in the industry, helping us to reduce spills from hundreds of overflow locations across the region and deliver a more than 60 per cent spill reduction in the decade to 2030 – the highest targeted reduction in the industry.

This is a really ambitious plan, and, alongside other wastewater investment we are making, such as reducing phosphorus levels in final effluent, this will go a long way towards improving our rivers and helping to build a greener North West.

How we respond to material themes: nature

Governance

TNFD disclosures

a. Nature is embedded in our governance structure and regulatory commitments. This is overseen and challenged by the board and its committees.

b. Interactions with nature through our operations are managed in multiple principal management committees across the business.

c. We actively work with our supply chain through our responsible sourcing principles to encourage our suppliers to operate in sustainable way.

Oversight of nature-related dependencies, impacts, risks and opportunities

As with climate-related matters, our CEO, Louise Beardmore, has overall accountability for nature-related matters with tracking, monitoring and management of impacts and dependencies on nature spread across our board and principal management committees. For instance, the executive team is responsible for regulatory performance that relates to nature, the ESG leadership group is responsible for matters such as land management and biodiversity, and the political and regulatory group is responsible for monitoring existing and emerging legislation on nature.

Assessing and managing nature-related issues

Natural capital and biodiversity matters are primarily managed by the ESG leadership group, with risks identified through natural capital accounting, climate adaptation planning, and our natural capital risk assessment process. Identified risks and opportunities are fed into our corporate risk register and overseen and escalated as necessary by the executive team. To support biodiversity enhancement and nature recovery across business functions, we have established a biodiversity governance structure that facilitates discussion, decision-making, and risk management. Biodiversity and nature recovery are embedded in our decision-making and strategic planning processes throughout the organisation.

Our performance and progress in priority locations, such as delivery of the WINEP, wider improvement in wastewater treatment, catchment management, our progress towards 100 per cent of Sites of Special Scientific Interest (SSSIs) having favourable or recovering status, peatland restoration, woodland planting, and our operational environmental performance, are shared monthly with the executive team.

Storm overflows and river water quality

We have a dedicated director to manage the end-to-end process of our Better Rivers programme to improve river water quality and reduce storm overflow operation.

The Better Rivers programme is overseen by the executive team, with regular updates and challenge from the board and its committees.

Local communities and stakeholder engagement

The decisions, development, and delivery of our business plan are scrutinised by an independent customer and stakeholder challenge group, YourVoice. The environmental and social capital sub-group meets periodically throughout the year to review our environmental proposals, outcomes and performance, ensuring that we are optimising the value of natural and social capital in our activities. A full history of the agenda and minutes can be found on the YourVoice website.

Approach to human rights

Our CEO has overall responsibility for compliance with human rights and modern slavery laws and best practice, with oversight from the board. The political and regulatory group and the ESG leadership team both have human rights and modern slavery within their remit. Last year, we completed 34 site audits with modern slavery due diligence checks on our construction partner sites as well as a focused review on workers' rights provisions with one of our Capital Delivery Partners (CDPs). All roles identified as relevant must complete role-specific training on modern slavery awareness, focusing on customer and community-facing roles to raise awareness of potential modern slavery risks.

Nature-related matters discussed at our internal senior management meetings over the past 12 months

Biome	Dependencies discussed	Impacts discussed
Freshwater	• WRMP24 – Defining our strategy to achieve a long-term, best-value and sustainable plan for water supplies in the region. Ensuring we meet future demand expectations from 2025 to 2085 and supply a system that is resilient to drought.	• Improving the condition of water bodies through our Better Rivers, WINEP investment programme. • Tackling our regulatory commitments on raw water quality, leakage, pollution, spills, and internal sewer flooding. • Reviewing our strategies on our chemicals investigation programme, emerging contaminants, PFAS, and microplastics.
Land	• Reviewing our bioresources strategy where we treat and recycle sludge to land for use as a high-quality fertiliser for local farms. • Collaborating with our suppliers to embed our circular economy principles and promote responsible sourcing and sustainability throughout our supply chain.	• Keeping informed on the emerging changes in guidelines and standards for nature-related reporting – we are not currently pursuing science-based targets for nature but will keep informed on the progress and review this decision periodically. • Our AMP8 mobilisation programme invests in improving the condition of nature, habitat health, and biodiversity.
Atmosphere	• Relying on renewable energy to power our production processes and tracking progress towards our green fleet ambitions for 2028.	• Progress towards our net zero performance and how we will achieve our targets. • On-site renewable energy generation through solar, wind, and hydro installations. • Developing a position statement on the use of HVO alternative fuel within our direct operations and supply chain.

Our supply chain modern slavery risk assessment is available on our website at **unitedutilities.com/corporate/responsibility/our-approach/human-rights**

See how **nature-related matters are considered within our governance structure** on page 37

Risk management

TNFD disclosures

a. We use horizon scanning, natural capital accounting, and land management approaches to identify, assess, and prioritise nature-related risks and opportunities.

b. We identify, assess and prioritise nature-related matters in our upstream and downstream value chain at site and corporate level using a range of controls.

c. We manage and monitor identified matters in the near term through our business planning process and over the long term through our drainage and water resources management plans.

d. Nature is fully integrated into our risk management process and informs the development of our short- and long-term strategic plans.

There are five drivers of nature change: climate change; land and freshwater use change; resource use and replenishment; pollution and pollution removal; and invasive non-native species. We consider nature-related impact drivers in our most significant group risks; a list of our principal risks can be found on pages 62 to 63. Identified risks and opportunities are managed, prioritised and integrated into our overarching risk management framework through a range of preventative and responsive controls.

Direct operations

Short-term and medium-term physical risks, at specific locations across the North West, are captured on an ongoing basis through our internal asset management systems. Our long-term risks are captured and managed as part of our long-term planning activities, such as our Drainage and Wastewater Management Plan (DWMP) and Water Resources Management Plan (WRMP), which look over a 25-year time horizon and are reviewed every five years.

We incorporate the drivers of nature change in our risk management process. For example, we have evaluated the risk of invasive non-native species across our operations and have developed a strategy to control and mitigate the presence. In this strategy, we have preventative controls in place, such as training and biosecurity protocols, and responsive controls such as direct management and removal at the source.

Upstream value chain

We have reviewed the Tier 1 suppliers within our upstream value chain areas, such as purchased goods and services, capital goods, construction, and energy. In each area, we assessed the top ten suppliers, by spend and quantity, on how they interact with nature at a broad scale. One of the most pertinent areas within the supply chain for the water industry is the supply of the chemicals used in the process of treating water and wastewater. We have a robust process to monitor the resilience of our chemicals supply and we regularly track the resilience of raw materials at each country of origin through our chemical risk and resilience register. This process is updated daily, tracking UUW specific risks at site level. We also receive monthly input from the National Chemical Steering Group, monitoring risks to UK chemicals availability. To mitigate impacts and improve the resilience of our supply, we aim that our supplies originate from multiple sustainable sources.

We will continue to review our full supply chain to identify specific dependencies and impacts relating to nature and adapt our strategies to reduce our risks and impacts. Through our United Supply Chain and responsible sourcing principles, we will continue to encourage our suppliers to also identify their impacts on nature and demonstrate best practice in the management of the natural environment, preventing loss and moving towards net gain of biodiversity.

Downstream value chain

Blockages in our wastewater network are identified as a key risk from our downstream value chain. Products that should not be flushed can build up in the pipes, and, when combined with fats, oils and grease, cause significant network blockages, potentially leading to sewer flooding and pollution in the environment. To avoid blockages, our 'Stop the Block!' campaign runs adverts on live TV, social media channels, our fleet vehicles, ITV weather sponsorship, and in the community via pop-up stands.

In addition to our educational campaigns, we actively engage in the development of standards and policy. We collaborated with the Water Research Centre (WRC) to help define what is 'Fine to Flush' for the accreditation scheme; this certification will help customers with their decisions when purchasing products and avoid putting 'unflushables' into our network. We will continue to engage in future research into new technologies and utilise innovations in the water sector.

How nature-related risks are integrated into and inform our risk management processes

Once our material risks are identified, we evaluate and prioritise our operational and strategic dependencies and impacts over short-term (one year), medium-term (up to 2030), and long-term (beyond 2030) time horizons. The identification, analysis and management of risk is integrated in our overall risk framework and often gives rise to opportunities that will positively affect our performance. All upside and downside risks are monitored through our business risk management processes, as outlined on pages 58 to 65.

How we respond to material themes: nature

Metrics and targets

TNFD disclosures

a. We track and monitor our nature-related risks and opportunities through our risk management framework, long-term strategic planning, and nature-related reporting.

b. We set short-, medium-, and long-term nature-related targets that align with regulatory expectations.

c. Performance against our environmental KPIs can be found on page 72.

Risks and opportunities

We monitor a wide variety of metrics and set targets to help track 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, and environmental performance. We manage our material nature-related risks through the controls set out on pages 58 to 59.

Impacts and dependencies

We embed our impacts and dependencies on nature and total value into decision-making. One of the ways we do this is through natural capital accounting to assess the extent and value of the benefits our land provides to us and the rest of society. As we update our account in future, we can track changes to our natural assets and quantify improvements from our investments.

We use disclosure and assessment metrics to monitor our regulatory performance and inform our short-, medium- and long-term strategic planning activities. Our targets are developed to achieve best value for our customers while aligning with regulatory expectations.

The table below discloses relevant local level nature-related metrics, including sector-specific metrics, as set out by the TNFD. Where applicable, we present our targets and describe our progress towards these targets. Performance towards our full list of environmental key performance indicators (KPIs) is reported on page 72.

TNFD metric no.	Driver of nature change	Metric	Position at end March 2025	Commentary
C1.0	Land/ freshwater/ ocean use change	Total spatial footprint (hectares)	56,000 hectares	Our Corporate Natural Capital Account asset register shows that our estate is made up of 37 per cent grassland, 33 per cent mountain moorland and heath, 12 per cent woodland and 10 per cent enclosed farmland – the remainder is a combination of freshwater, urban and coastal margins. Our services are also dependent on over 550,000 hectares of catchment land across the North West Region, not under our ownership or management. **Target:** We do not currently have a target to increase or decrease our owned and managed land; any major land sales or acquisitions will be reported via our next Corporate Natural Capital Account.
C1.1		Extent of land use change	3,000 hectares of peatland restored	We have restored natural processes on core upland sites owned by UUW and also on land we depend on, through large-scale planting and natural regeneration, peatland restoration and re-establishment of historic river systems. **Target:** Further 1,500 hectares of peatland restoration by 2030.
			91% favourable or unfavourable recovering condition SSSIs	Our estate includes 22,523 hectares of SSSI sites; in 2004, 14 per cent of total SSSI sites were in favourable or unfavourable recovering condition, we have increased this to 91 per cent through the delivery of our Sustainable Catchment Management Programme (SCaMP) initiative and significant investments in priority locations over the last five years. **Target:** Achieve 100 per cent favourable or unfavourable recovering status by 2030. We will do this through our AMP8 investment programme.
			640,252 trees planted	Woodland creation boosts biodiversity, protects water quality, improves air quality and helps with flood mitigation. We continue to identify suitable locations for further tree planting. **Target:** Plant 500,000 trees by 2030.
C2.0	Pollution/ pollution removal	Pollutants released to soil	Not measured	We do not currently measure this activity; we will closely monitor progress in this area in future and act accordingly.
C2.2		Waste generation and disposal	98.3% waste to beneficial use	All of our sewage sludge is treated to required standards before recycling to local agricultural land as biosolids for use as a fertiliser. Our biosolids comply with the Biosolids Assurance Scheme and have a 99.9999 per cent pathogen reduction.
C2.3		Weight of plastic bottles provided to customers	9 tonnes	We provide bottled water to our customers during periods when water supply is interrupted or may be unfit for consumption. The bottles we supply contain at least 25 per cent of recycled materials and are 100 per cent recyclable by users.
C2.4		Non-GHG air pollutants	0.9 NOx/GWh	Through the implementation of cleaner engine technology at our two largest Combined Heat and Power engine (CHP) facilities, Manchester and Liverpool, we have reduced the amount of NOx in the combustion gas being emitted from our engines by 50 per cent per cubic metre of gas produced (from 500mg down to 250mg NOx per m^3). This resulted in a reduction of tonnes of NOx emissions per GWh of electricity generation. We calculated that, through our actions, we have avoided 120 tonnes of NOx emissions over the AMP compared to FY2019/20. **Target:** 1.42 NOx/GWh (three-year rolling average)
C3.0	Resource use/ replenishment	Water withdrawal and consumption from areas of water scarcity	0 megalitres	According to the Environment Agency classification, our operations do not reside in areas of water scarcity.
C3.1	Invasive alien species (IAS) and other	Quantity of high-risk natural commodities sources from land/ ocean/freshwater	2	We identified the use of cement and steel throughout our capital programme as high-risk natural commodities or products where production can have a significant negative impacts on nature. These were identified using the SBTN High Impact Commodity List (2023). We are working towards a full assessment of our supply chain to determine the status of raw materials we use and the impact of resource extraction on the environment at the source.
C4.0		Proportion of high-risk activities operated under appropriate measures to prevent the unintentional introduction of IAS	Not measured	We do not currently report on the proportion of high-risk activities. We have identified areas where unintentional spread of invasive non-native species (INNS) can occur within our operations and are developing a strategy to tackle INNS.
Sector-specific disclosure indicators and metrics				
A3.2	Resource use/ replenishment	Water reduced, reused or recycled	Not measured	We do not currently measure this activity; we will closely monitor progress in this area in future and act accordingly.
WU.C2.11	Pollution/ pollution removal	Sanitary sewer overflows and recovery	39% reduction in spills per overflow	As part of our commitment to improve storm overflow performance and reduce spills impacting on the environment, we have a large overflow investment programme, reducing spills through the use of blue-green or hybrid solutions **Target:** Over 60 per cent reduction in spills per overflow in the decade to 2030.
A3.3	Resource use/ replenishment	Water loss mitigated	9% leakage reduction	We are at our lowest levels of leakage across the North West, and in the last year we have increased our find and fix rates by 70 per cent, fixing more leaks than ever before. **Target:** Further 13 per cent reduction by 2030.
WU.A6.0	Ecosystem condition	Clean drinking water provision	3.5% reduction in per capita consumption	In AMP8, we aim to reduce per capita consumption (PCC) to 110 litres per person per day by 2050, in line with the Government's Environmental Improvement Plan 2023. Customer behaviour to reduce water consumption plays a key role in reducing overall demand and this, combined with our efforts to reduce leakage, helps to ensure a sustainable supply of water across the North West. **Target:** Reduction in per capita consumption of 5 per cent for households and 7 per cent for businesses by 2030.