Key performance indicators

Our key performance indicators for building a greener North West are achievement of our Better Rivers commitments, our carbon pledges relating to renewable energy, green fleet, peatland restoration and woodland creation, and the Environment Agency's Environmental Performance Assessment. We report on a selection of other environmental metrics of interest to stakeholders on page 72.

Better Rivers: Better North West commitments

The percentage of in-year milestones delivered as part of our Better Rivers programme.

Target

At least 95% of programme milestones delivered by 2025

Annual performance

100%

All of this year's Better Rivers programme milestones have been delivered.

2023/24: 100 per cent of milestones for the year

2022/23: 100 per cent of milestones for the year

Status

Met expectation/target

Key stakeholder Environment

Relevant material themes⁽²⁾ Environmental river water quality and storm overflows

Political and regulatory environment

Trust, transparency and legitimacy

Link to remuneration⁽³⁾ Bonus

Assurance⁽⁴⁾ Internal audit team

Carbon pledges

Six pledges to reduce our carbon footprint. Activities include peatland restoration, woodland creation and reducing the reliance of fossil fuels of our fleet.

Target

Individual targets for each of the six carbon pledges, as set out on page 74

Annual performance

Good progress

We have met three of the six pledges, and continue to make progress with the remainder. We have over 200 battery electric vehicles on the road and a further 200 ordered, 83 hectares of woodland will have been created by the end of the 2025 planting season, and we have reduced our scope 1 and 2 emissions by 10.5 per cent since 2020.

More information can be found on page 74

2023/24: Pledges 2, 4 and 6 met

2022/23: Pledges 2 and 6 met

Status

⁽⁰⁾ Measure relates to the water and wastewater activities of our regulated entity, United Utilities Water Limited.

(3) Read our remuneration report, with details about the bonus and Long Term Plan (LTP), on pages 146 to 172.

Met expectation/target

Key stakeholder Environment

Relevant material themes⁽²⁾ Climate change mitigation

Energy management

Trust, transparency and legitimacy

Link to remuneration⁽³⁾ LTP

Assurance⁽⁴⁾ Independent third-party verification

EA's Environmental Performance Assessment (EPA) rating⁽¹⁾

The Environment Agency's annual assessment across six, key sector, environmental performance measures.

Target

Upper quartile performance within the water industry each year

Annual performance

4-star 'industryleading' rating

The most recent assessment is for 2023, when we were one of only three companies awarded the top 4-star rating, meaning we were classed by the Environment Agency (EA) as an industry-leading company.

The EA will publish its annual assessment for 2024 later in 2025.

2022: Joint second (3-star)

2021: Joint first (4-star)

Status

Met expectation/target

Key stakeholder Environment

Relevant material issues⁽²⁾ Customer service and operational performance

Trust, transparency and legitimacy

Political and regulatory environment

Link to remuneration⁽³⁾ LTP

Assurance⁽⁴⁾ Independent third-party verification

(4) Read more about the assurance over our performance metrics on page 67.

 $\space{}^{\mbox{\tiny (2)}}$ Read more about our materiality assessment on pages 29 to 30.

Creating value for Customers Customers

Communities



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Consistently strong environmental performance

The Environmental Performance Assessment (EPA) published by the Environment Agency (EA) is an annual assessment consisting of seven metrics against which the performance of water and wastewater companies is assessed on a red, amber or green (RAG) basis. Based on performance across all of the metrics, star ratings (one to four, with four being the highest) are then applied to each company.

The most recent assessment is for the 2023 calendar year, and we were awarded the top '4-star' rating, meaning we were classed by the EA as industry leading.

We have been rated either three stars ('good') or four stars ('industry-leading') in every year's assessment so far, with the top 4-star rating secured in six of the last nine years. This is a strong achievement, particularly as the thresholds that the EA uses to assess companies' performance tighten each year, but we have remained consistently one of the best in the industry.

For 2023, we were assessed as green (achieved target or better) on six of the seven metrics.

On the seventh metric, total pollution incidents per 10,000km², we were assessed as amber. This was disappointing, as we have been an industry-leading performer on minimising pollution, and had been assessed as green against this metric for the previous 12 years running.

2023 was a particularly wet year and, with pollution being a weather-responsive measure, no company was assessed as green against this metric, but our performance did remain one of the best in the industry. We remained green against serious pollutions – the only company to be green on serious pollutions in every year of the EPA since it began – and we were joint top in the metric for self-reporting of pollution incidents.

We remain committed to improving further, as set out on page 09, with a 30 per cent targeted reduction in pollution incidents in our AMP8 final determination.

We were pleased to achieve 100 per cent across three of the seven metrics, including the on-time delivery of our Water Industry National Environment Programme (WINEP) schemes – a programme that is delivering significant improvements for the environment, including rivers, across the North West.

We expect that the EA's assessment for the 2024 calendar year will be published later in 2025.

Improving environmental water quality and reducing spills from overflows

We are dedicated to improving rivers, bathing waters, and other water bodies across the North West, and this is reflected in our strategic priorities and the commitments we have made as part of our Better Rivers programme, with four pledges supported by around 30 commitments to kick-start a river revival in the region.

Spills from storm overflows are an area of particular concern for many stakeholders across the UK, and we are committed to changing this century-old feature of wastewater networks. This is a significant change to the way these networks have operated for the last 150 years, not just in the UK but across the world, and it will not happen overnight.

In the North West, with more rainfall and more combined sewers (receiving rainwater in the same pipe as sewage) than average in the country, delivering the significant reduction in spills from storm overflows required by the Environment Act 2021 will be more challenging in the North West than in other areas. This is why we have an industry-leading spill reduction programme for AMP8, and have been accelerating work at high-spilling sites to deliver meaningful improvements as quickly as possible.

2024 was the first year with full monitoring across the entire period, as we completed fitting monitors to all of our storm overflows by December 2023. To improve transparency, we also published a map that shows the location and operational status of each overflow in near-real time.

View our map of overflows across the North West at unitedutilities.com/ better-rivers/storm-overflow-map

The investment and dedication we have put into spill reduction is delivering significant improvements. In 2024, we had almost 20,000 fewer spills than in 2023, amounting to more than 205,000 fewer hours, which is a 31 per cent reduction in the duration of those spills.

Despite experiencing periods of particularly intense rainfall and four named storms in the last three months of the year, spills per overflow were down 39 per cent compared with the 2020 baseline. This surpasses our AMP7 target of a one-third reduction by 2025, and demonstrates the great progress we are making.

However, there is still a long way to go. Our AMP8 plans include the UK's biggest storm overflow spill reduction target, to deliver a reduction of more than 60 per cent in the decade to 2030, with an industry-leading £2.4 billion of investment dedicated to this in our final determination for the next five years.

Another area that is particularly high on stakeholders' priorities for environmental water quality improvement is reducing phosphorus levels. Phosphorus can enter bodies of water from a number of sources, including agricultural runoff, industrial discharges, and wastewater. It can cause problems, particularly in static bodies of water such as lakes, where it stimulates the growth of algae. This is worsened by warmer weather, which also encourages algal bloom, so climate change will continue to increase this issue.

We have already delivered significant reductions in phosphorus levels from treated wastewater through our WINEP delivery, and our AMP8 plans include upgrading 80 wastewater treatment works to remove phosphorus at the highest technically achievable limit, and a further 28 per cent targeted reduction in phosphorus by 2030.

We have been innovating with more sustainable ways to remove phosphorus, including natural plant-based coagulants to replace some of the chemicals that are traditionally used, and FujiClean – an innovative version of a septic tank, which provides a full wastewater treatment system in a box, removing phosphorus without the use of chemicals. More on FujiClean can be found on page 73. We are also working with partners and third parties to help reduce phosphorus from other sources.

Focus on Windermere

Windermere is an iconic lake at the heart of the Lake District National Park and a popular tourist attraction, and its water quality has attracted a great deal of interest. We have been working to protect and improve Windermere's water quality for many years, taking responsibility for everything within our control and supporting others to help safeguard the lake for generations to come.

In 2024, despite rainfall in Cumbria being heavier than it was in 2023, we reduced both the number and the duration of spills around Windermere, and our AMP8 plans will see significant further improvements.

We are investing £200 million to improve water quality in the Windermere catchment – tackling phosphorus and other nutrients as well as reducing spills from storm overflows. Our investment will bring every wastewater treatment works in the catchment up to the highest possible standard there is, using new innovative technologies, and increase storage capacity at each of our storm overflows to achieve the long-term target of ten spills or less per year.

In addition to this investment to tackle our impact, we are also working in partnership with Love Windermere to help address other sources of pollution into the lake from private households and commercial sites.

More information on the innovative technologies we are using around Windermere can be found on page 73.

Innovative interventions to reduce pollution

We are increasingly making use of innovative technology and techniques, including artificial intelligence (AI) and machine-learning, to help us predict and resolve issues across our wastewater network before they lead to sewer flooding or pollution incidents.

Our investment in Dynamic Network Management (DNM) has helped us to clear record numbers of predictive and proactive blockages, leading to a significant reduction in reactive blockages, particularly in the last three years. We are now deploying the same DNM logic, tools, and systems to predictively and proactively detect and resolve pollutions, and we are already seeing positive results from this.

We have also now mobilised our Drone Squad to help detect pollution incidents and their sources, whether these be from United Utilities-owned assets or from external third-party sources. Our seven drones have varying capabilities, including infra-red, internal pipe inspections, and LIDAR surveillance.

Around a third of our pollution incidents are caused by power outages, and part of our AMP8 investment programme involves deploying back-up generators and large-scale batteries to ensure that key sites and assets can continue operating when there are outages on the grid, helping us to minimise pollution incidents. This is in addition to further potential benefits of this increasing power resilience, including tariff management opportunities.

Conserving water

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.

We are using a number of innovations including satellite imagery, artificial intelligence, and a new 'no dig' repair capability. This has shown extremely strong results in trials over the last six months with a 92 per cent success rate, helping us to reduce both the time taken to fix leaks and halving the operational costs of repair. Both of these are key areas of focus as we drive further improvements against our stretching AMP8 targets.

We have also been working with customers to better understand their usage, helping them to lower their consumption and their bills. This includes targeted communications to high water users and water efficiency home audits. This work has helped us to identify areas of high usage and internal leaks and, once fixed, these have helped drive reductions in per capita consumption, where we are an upper quartile performer.

Net zero target and environmental pledges

Our net zero transition plan, set out on pages 34 to 36, is ambitious and adaptive, and aims to achieve net zero (as defined by the SBTi Net-Zero Standard) across all three emissions scopes by 2050.

In 2020, we made six carbon pledges, and have already achieved three of these, as initial priorities to reduce our carbon footprint. Our activities include switching to low-carbon electricity, changing our fleet to green vehicles, restoring peatland, and creating woodland.

Our peatland restoration and woodland creation programmes are not only beneficial from a carbon perspective, capturing and sequestering greenhouse gases, but also deliver wider benefits to protect water and other habitats, and enable recreational access for communities and tourism.

This year, the Science Based Targets initiative (SBTi) validated that our science-based greenhouse gas emissions reduction targets conform with the SBTi Corporate Net Zero Standard, meaning we are the first (and only) UK water company to have approved science-based targets for the near term, long term and net zero.

Our net zero ambitions will be supported by £55 million of net zero enhancement funding approved in the AMP8 final determination to support the delivery of a net zero catchment strategy for St Cuthbert's Garden Village, explore technologies to monitor nitrous oxide release from wastewater processing, and restore a further 1,500 hectares of peatland.

Building on our carbon and Better Rivers pledges, later this year we will finalise a set of nature pledges to make clear our continued action to restore, enhance and connect habitats across the North West. As set out on page 74, these nature pledges will include activities that support the Government's commitment to the global '30 by 30' target – protecting 30 per cent of land and ocean by 2030.

Working with our supply chain to reduce scope 3 emissions

Building close relationships with our supply chain is helping to drive innovation, deliver value for our customers, and take steps to decarbonise the work that we do.

One example of this collaboration has taken place on our Vyrnwy Aqueduct Modernisation Programme sites, where our supplier Avove has been trialling hydrotreated vegetable oil (HVO) as an alternative fuel source for their equipment. This has given great insights on the potential of using HVO as a reliable fuel source, as well as reducing carbon emissions. Another supplier, Costain, has been using low-carbon solutions on our sites during the construction phase. This has included the use of hybrid generators and low-carbon materials, which have helped reduce carbon emissions and improve our understanding of what innovative technology and practices can be adopted for future use.

In early 2025, we sent out our first carbon questionnaire to a select number of suppliers to understand their maturity, journey so far, and decarbonisation plans. This has provided insight into our suppliers' decarbonisation strategies, allowed us to understand more granular data in relation to supplier emissions, and identified potential opportunities for collaboration.

Climate resilience

We are proud to be contributing to the UK's efforts to mitigate climate change, but we remain conscious that adapting to more extreme and variable weather is a significant challenge. We are already seeing the effects of climate change on the region's weather, with increasing summer temperatures, wetter winters, and more extreme rainfall events. It is, therefore, important that we also continue to adapt and enhance the resilience of our assets, processes and customer services to its effects.

The risks of climate change are examined in our adaptation reports. We published our fourth adaptation report in 2024, setting out our approach to assessing the likely future impacts of climate change and the steps we are taking now, and expect to take in the future, to adapt to the challenges.

In our latest report, we have further developed our understanding of climate risk by incorporating the latest climate science into our risk assessment processes. Taking a regional approach to assessing the effects of climate change 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 have also integrated our improved understanding of the impacts of climate change into our other long-term plans. Our investment plans for AMP8 will help us to significantly improve climate resilience as well as environmental performance. We account for climate change impacts on our water supply and demand balance in our Water Resources Management Plan (WRMP), and apply the same approach in our Drainage and Wastewater Management Plan (DWMP), with our plans to intercept rainwater. increase storm tank capacity, and upgrade treatment works. In our long-term delivery strategy, within our PR24 business plan, we have used an adaptive planning approach to demonstrate how our services might be resilient to a range of plausible climate change scenarios.

We also hosted the inaugural Resilience Community of Practice to help raise awareness for the need to adapt to climate change. The event brought together industry leaders, experts, and passionate individuals focused on building resilience across various sectors. We built a collective view on progress to date in climate change adaptation, and explored our ambitious plans to build a more climate-resilient region.

Rainwater management

With more urban rainfall, increasing challenges from climate change, and an ever-growing population, we need to find new ways to manage rainwater. We were really pleased to have investment of more than £250 million approved in our final determination for rainwater management and climate resilience.

Part of our rainwater management strategy is to develop initiatives that capture, remove and slow rainwater to impact the rate at which it enters our sewers, helping to relieve the pressure placed on the system and alleviate flood risk. This also helps to improve biodiversity, provides green spaces for human mental and physical health benefits, and makes communities more resilient in the face of climate change impacts.

As part of our Green Recovery programme, we have delivered sustainable drainage (SuDS) schemes in partnership with local authorities. For example:

- Raingardens and permeable surfaces to manage rainwater in Oldham, also providing public realm improvements with a new park area, disability ramp, seating and a cycling route with cycle racks.
- 242 SuDS-enabled tree pits across Blackpool town centre to re-direct surface water runoff from the highway gullies into street trees on the associated pavements, and achieve health, wellbeing and natural capital benefits for the local area.
- Raingardens, permeable surfaces, recreation seating, cycleway and SuDS-enabled trees in the centre of Altrincham.

We are working in partnerships with combined authorities in Greater Manchester and Merseyside to improve rainwater management in these urban areas, as mentioned on page 86.

Property level interventions can also make a difference in some areas. We are carrying out our biggest property level supply-and-install trial in Hale, part of Cheshire, where we are installing rainwater planters at customer properties to build household resilience against high rainfall events by providing rainwater retention capabilities.

39%

reduction in spills per monitored storm overflow compared with 2020 baseline

4-star industry leading

in the EA's annual assessments for 2023

Strong progress

against carbon and river pledges, and in the process of finalising a set of new nature pledges

Status key Performance against target 🚺 Met expectation/target 🬔 Close to meeting expectation/target 🚺 Behind expectation/target								
Stakeholder key								
-B.		<u>泉</u> 一息 、皮ノ	æ	لم. س	<i>d</i>		ā	
Customers Enviro	nment Co	ommunities	Colleague	s Supp	liers		Invest	tors
			·					Status
		Performance			e ⁶ tion ⁽²⁾		e	nce rget
					urance	c to unera	cehold	formaı inst ta
Measure	2025 target	2024/25	2023/24	2022/23	Ass	Linl	Key stak	Peri aga
Pollution incidents per 10,000km sewer network ⁽¹⁾	19.5	36.2	27.93	16.29	RRA	LTP	\square	
Reduction in spills per storm overflow monitored	33% sustainable reduction ⁽⁴⁾	39%	24%	41%	IAT	Bonus	\square	
Treatment works compliance ⁽¹⁾	99%	98.46%	99.0%	98.5%	RRA	LTP	\square	
Leakage reduction ^(t)	15% ⁽³⁾	9%	9%	6%	RRA	LTP	\bigcirc	
Reduction in per capita consumption ⁽¹⁾	6.3% ⁽⁴⁾	3.5% decrease	2.5% decrease	0.5% increase	RRA	PC	\square	
Internal flooding incidents per 10,000 sewer connections ⁽¹⁾	1.34	3.52	4.35	2.32	RRA	PC	₽Ĵ	
External flooding incidents ⁽¹⁾	5,859	7,315	7,063	5,916	RRA	PC	₽Ĵ,	
Waste to beneficial use	98%	98.3%	98.3%	98.3%	IAT	n/a	\bigcirc	
Enhancing natural capital for customers ⁽¹⁾	£4 million	£5.386 million	£15.777 million	£0	RRA	PC	\square	
Number of trees planted	500,000	640,252	600,466	565,733	IAT	n/a	\$~8 \g/	
Carbon pledge 1: reduction of scope 1 and 2 GHG emissions	14% reduction ⁽⁵⁾ (42% by 2030)	10.5% reduction	3.4% reduction	3.7% reduction	ITV	n/a	\$-8 \\$/	
Carbon pledge 2: renewable electricity purchased	100% by 2023	100%	100%	100%	ITV	n/a	\bigcirc	
Carbon pledge 3: green fleet	100% by 2028	204 vehicles	91 vehicles	33 vehicles	IAT	LTP	\bigcirc	
Carbon pledge 4: peatland restoration	1,000 hectares (ha) by 2030	3,000 ha	1,211 ha	585 ha	ITV	LTP	\bigcirc	
Carbon pledge 5: woodland created	550 hectares (ha) by 2030	83 ha	37 ha	37 ha	ITV	LTP	\square	
Construction services suppliers with science-based targets	66%	78%	23%	23%	IAT	LTP	G. C.	
Better air quality: nitrogen oxides (NOx) emissions per unit of renewable electricity generated ⁽¹⁾	1.42	0.87	0.96	1.07	RRA	PC	$\langle \mathbf{P} \rangle$	
Energy generated directly, and with partners, as a percentage of used	25% at 2026	22.5%	22.4%	23.0%	ITV	LTP	\bigcirc	

⁽⁰⁾ Measure relates to the water and wastewater activities of our regulated entity, United Utilities Water Limited. Total uncapped performance delivered.

Read our remuneration report, with details about the bonus and Long Term Plan (LTP), on pages 146 to 172. PC = Performance commitment subject to reward and/or penalty as part of customer outcome delivery incentives (ODIs). These feed into both bonus and LTP through inclusion of customer ODIs and return on regulated equity (RoRE), respectively.

(3) As measured against a 2017/18 baseline.

(4) As measured against a 2019/20 baseline.

(5) As measured against science-based target baseline year 2019/20.

(6) Read more about the assurance over our performance metrics on page 67.

ITV = Independent third-party verification. RRA = Regulatory reporting assurance. IAT = Internal audit team.

Performance

Case study: Innovative wastewater treatment comes to Windermere

We're delivering the largest ever upgrade to wastewater services in the Windermere catchment – through a £200 million package, which will improve and help protect this iconic lake's water quality.

As part of this investment, we're bringing world-leading innovations to Windermere. We're the first water company in Europe to introduce an innovative low-carbon, chemical-free wastewater treatment process – which is almost like a treatment works in a box – and Near Sawrey will be one of our first sites to have this technology installed.

FujiClean, which was developed in Japan, is a chemical-free phosphorus removal solution, originally developed as an alternative to septic tanks. The technology was discovered by one of our senior engineers at a conference which showcased wastewater innovations from all over the world. He then worked with the founding company to trial the system for United Utilities.

Our wastewater county business leader for Cumbria said: "The system offers a much more enhanced wastewater treatment option that provides phosphorus removal without the use of chemicals. The treated wastewater is much better quality and we can now remove phosphorus in the same system. An added benefit of the design is that it doesn't need emptying as much. This, combined with not needing chemical deliveries, means fewer vehicle movements to our small sites – a win for the environment and rural communities." Our innovation team has already trialled the technology a test site in Cheshire, with promising results. Work will begin to install FujiClean at Near Sawrey later this year.

It's not just at Near Sawrey that we're installing innovative techniques to improve river water quality. At Langdale, an innovative biological approach is being introduced that uses renewable plant material to support the growth of the bacteria used to treat wastewater. Mobile Organic Biofilm™ (MOB™) will enhance the treatment processes at Langdale Wastewater Treatment Works, also enhancing Windermere's water quality. We are already seeing great results in Cheshire where this technology is helping to improve water quality in the River Bollin.

There are ten wastewater treatment works that collect and clean the sewage of homes and businesses around the Windermere catchment. The largest, at Tower Wood, treats the wastewater of around 18,000 properties. It's already treating the wastewater to the best technically achievable standard there is, and, as part of the £200 million investment, the remaining nine sites will also be upgraded. Many of those are much smaller and some serve populations in the low hundreds or less. In AMP8 we'll be tackling the storage capacity at all six of the storm overflows which can operate around Windermere, to reduce spills to less than ten per year, by, or before, our regulatory requirements. Once all six schemes are delivered, this largest-ever upgrade will deliver an 89 per cent reduction in storm overflow spills. It will also mean a significant reduction in nutrients, with more phosphorous removed per year, as the vast majority of the wastewater around Windermere will be treated to even higher standards, using the best global technology.

Alongside these plans, we're working in partnership with Love Windermere to help address other sources of pollution, with a plan to help others, including private household septic tanks or packaged treatment plants used by larger commercial sites.

Delivering value for



This is creating value for the environment, local communities, and customers.

Read more about what we're doing to help improve Windermere water quality on our website at unitedutilities.com/ my-local-area/news-in-your-area/cumbria/ windermere/action-windermere

Pledges towards a greener North West

Across the five counties, we own over 56,000 hectares of land, which delivers several ecosystem service benefits such as water supply, timber, air quality regulation, and recreation. Demonstrating our commitment to protect and enhance this value, we have made carbon and Better Rivers pledges, and we will finalise new nature pledges later this year.

Carbon

Five years ago, we made six pledges with our initial priorities for our part towards a low-carbon future. We have since set four near-term targets and long-term targets, all of which have been validated by the Science Based Targets initiative (SBTi). We have also incorporated measures into our remuneration via our Long Term Plan.

Pledge 1: 42 per cent reduction of scope 1 and 2 emissions by 2030 10.5 per cent reduction since 2020

Pledge 2: 100 per cent renewable electricity by 2021 Achieved in 2021

Pledge 3: 100 per cent green fleet by 2028 204 vehicles; 8 per cent of our fleet

Pledge 4: 1,000 hectares of peatland restoration by 2030 Achieved in 2024

Pledge 5: Plant one million trees to create 550 hectares of woodland by 2030 640,252 trees planted and 83 hectares of woodland created since 2020

Pledge 6: Set a scope 3 science-based target by 2021 Achieved in 2021

We have achieved three of our six carbon pledges and are making good progress to deliver the rest.

All electricity bought through contracts has been renewable since October 2021. Science-based targets covering all scope 3 emissions were approved by the SBTi in 2021 and, so far, we have 3,000 hectares of peatland under restoration meeting this pledge and the associated LTP target.

Advanced telematics mean we now have a better understanding of our transport needs and can optimise the number and types of vehicles while accelerating the decarbonisation of our fleet. Once recent orders are delivered, we will have over 400 all-electric vehicles, including four HGVs, while continuing to trial alternative fuels such as hydrogen and HVO. Creating and maintaining even small pockets of woodland can deliver natural flood management, provide habitats for wildlife and boost biodiversity in addition to climate benefits. Our planting does not prioritise carbon sequestration, as that can promote high-growth monoculture woodland; instead, we value actions that have broader sustainability or conservation merit. We choose appropriate species mixes and planting density, to create the best woodland for our land holding. Our current estimate is that we will have created our pledged 550 hectares of new woodland by the end of the 2030 planting season.

We have met our scope 3 supplier engagement SBT with 78 per cent of category 2 suppliers by emissions having set near-term targets aligned to SBTi criteria.

Better Rivers

In 2022, we launched our Better Rivers: Better North West programme and made four pledges, underpinned by around 30 commitments, to improve river water quality, leading to 115 miles of improved waterways.

Pledge 1: Ensuring our operations progressively reduce impact to river health

Pledge 2: Being open and transparent about our performance and our plans

Pledge 3: Making rivers beautiful and supporting others to improve and care for them

Pledge 4: Creating more opportunities for everyone to enjoy rivers and waterways

We are continuing to grow our team of River Rangers who proactively patrol North West riverbanks, checking on our assets, taking part in litter picks, building relationships with our partners, engaging with community groups, and taking water samples at a variety of locations.

We also have sensors installed to monitor the operation of every one of our more than 2,250 storm overflows, and the data is published on our interactive, near real-time map.

We are forging close links with local communities and organisations, such as Mersey Rivers Trust and Friends of Bluebell Woods. We work with groups to improve the environment and river water quality through activities such as Himalayan balsam bashing – pulling up and destroying this invasive non-native species.

Our Better Rivers community fund, set up as one of our commitments, supports groups who know and care for waterways. For example, Bollin and Birkin Flyfishers, in Cheshire, successfully applied to the fund for safety equipment, water testing kits, and information boards, to help them act and raise awareness of the need to protect and support better rivers in the area.

Nature

Later this year, we will finalise several nature pledges to clearly set out our dedication to restore, enhance and connect habitats across the North West.

Our nature pledges will focus on both land with special designations, and habitats that are prominent in our region, and include activities that:

- support the government commitment to the global '30 by 30' target, protecting 30 per cent of land and ocean by 2030;
- enhance biodiversity;
- create and improve the condition of woodland; and
- restore peatland.

TCFD

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Strategic

Energy and carbon report

The Companies Act 2006 (Strategic Report and Directors' Reports) Regulations require us to publish this energy and carbon report applying the 2019 UK Government Environmental Reporting Guidelines, including the Streamlined Energy and Carbon Reporting Guidance (SECR). We use the financial control approach so our energy and carbon accounting is aligned with the consolidated financial statements for United Utilities Group PLC for 1 April 2024 to 31 March 2025. This includes the subsidiaries listed in section A7 on page 238.

Energy data

	2024/25	2023/24	2022/23	2021/22
	GWh	GWh	GWh	GWh
Energy use				
Electricity	822.4	819.6	818.8	803.3
Natural gas	14.2	34.1	33.6	33.8
Biogas in boilers	16.4	n/a	n/a	n/a
Stationary fossil fuels (gas oil, kerosene, diesel)	49.1	51.4	55.8	50.5
Energy for transport (from fuel used or distance travelled)	76.0	75.8	74.8	72.6
Low-carbon alternatives (HVO, LPG, EVs)	0.27	0.25	0.05	0.20
Total energy used ⁽³⁾	978.3	981.1	983.0	960.4
Electricity purchased				
Grid renewable ⁽¹⁾	680.1	657.6	655.6	611.0
Grid standard tariff ⁽²⁾	0.13	0.09	0.13	22.3
Total purchased	680.2	657.7	655.7	633.3
Renewable energy generated				
CHP	105.2	120.4	123.0	133.8
Biogas in boilers	16.4			
Solar	42.0	47.3	46.4	47.8
Wind	4.7	5.2	5.1	4.8
Hydro	6.3	7.6	6.9	7.2
Biomethane	45.6	40.2	44.7	48.9
Total generated	220.2	220.7	226.1	242.5
Renewable energy exported				
Electricity	16.1	18.6	18.3	23.5
Biomethane	45.6	40.2	44.7	48.9
Total exported	61.7	58.8	63.0	72.4

 All contractually purchased electricity since October 2021 has been bundled with, or backed by, separately purchased, REGO certificates.

(2) Grid standard tariff electricity is the consumption on interim tariffs for newly adopted sites.

I All energy was consumed in the UK and if calculated from volume or distance used net calorific values.

Energy efficiency actions

We have an integrated approach to energy efficiency across site operations, engineering and energy services to achieve successful outcome through the continuous improvement of:

- people optimising ways of working;
- systems improving visibility of use and analysis of data systems; and
- technology targeted investment to improve efficiency.

Our energy management programme sets a common approach for benchmarking performance and develops action plans to optimise energy use. The programme also includes operational carbon e-learning and a comprehensive energy performance reporting and analysis capability.

A key feature of the programme are local workshops where specialist teams of energy engineers work with operational staff to identify problems and opportunities on their site. The opportunities identified are collated into a company-wide database for assessment and to develop business cases for future projects. We have completed hundreds of systems and technology measures to improve energy efficiency from installing low energy lighting to automating operations of our water and wastewater assets, such as with new controls for secondary treatment and pumps. We have also installed over 3,000 sub-meters to identify opportunities to restrain energy use and quantify the financial and GHG emissions benefits of interventions.

A focus this year has been on the installation of variable speed drives (VSD) to improve the control and efficiency of pumps. At Bearstone, use of a VSD has been shown to reduce the power consumption by up to 25 per cent with no reduction in the flow rate of the pump. At Denton Pumping Station, using a VSD instead of throttling improved the performance and lifespan of pumps by operating closer to their best efficiency point.

VSDs can also improve the operation of other equipment such as compressors. A study at Huntington Water Treatment Works found that about a third of one compressor's energy consumption is in off-load operation. Replacing the existing air compressor with a 30kW compressor with a VSD would reduce the start/stops and off load operation and savings of 38.5 per cent might be achieved.

Energy strategy

Our energy management strategy has four objectives:

- Efficient use of energy;
- Maximising self-generation and direct supply opportunities;
- Minimising costs; and
- Building supply resilience to ensure we can deliver our services.

Each year, we serve a growing population, which means increased energy use as we strive to achieve stringent environmental performance targets. We seek to mitigate this through our energy management and, in recent years, have maintained consistent energy use in the face of considerable upward pressures.

To support our aims to switch to clean, green energy, last year, we introduced an energy metric and included it in the 2023 Long Term Plan (LTP) for executive directors. This target incentivises energy efficiency, switching away from fossil fuel, and clean energy generation. For the 2024 LTP, the remuneration committee has approved a direct measure to reduce the fuel-related GHG emissions to further encourage switches to low-emission power sources.

Switch to clean, green energy

As illustrated below, only 8 per cent of our total energy used is from fossil fuels. We aim to reduce this further through our energy management strategy.





Energy and carbon report: GHG emissions inventory

Emissions are calculated by estimating the individual greenhouse gases that result from all United Utilities' activities, converted into a tonnes carbon dioxide equivalent (tCO_2e). Tools and values used in 2025 include UK water industry Carbon Accounting Workbook v19, the 2024 UK Government GHG conversion factors for company reporting, global warming potentials from IPCC 5th Assessment report and Global CEDA (Comprehensive Environmental Data Archive) v7. 100 per cent of our emissions are related to activities and energy consumption in the UK.

Our greenhouse gas inventory, and the underlying energy data, has undergone independent third-party verification by Achilles group and is certified to the requirements of the Toitū CarbonReduce programme, as aligned to the GHG Protocol Corporate Accounting and Reporting Standard (2015) and the international carbon reporting standard ISO 14064, Part 1:2018. The assurance certificate and report can be found at **unitedutilities.com/corporate/responsibility/environment/climate-change**

						SBT baseline
		2024/25	2023/24	2022/23	2021/22	2019/20
Scope 1 and 2 greenhouse gas emissions ⁽⁴⁾		tCO ₂ e	tCO ₂ e	tCO ₂ e	tCO ₂ e	tCO ₂ e
Scope 1: Emissions from activities we own or cont	rol, e.g. burning fo	ssil fuels, waste	water and sludg	e processing		
Direct emissions from burning of fossil fuels		15,922	20,188	21,166	19,207	15,247
Process and fugitive emissions - including refrigera	nts	90,633	96,173	94,915	96,020	96,186
Transport: Company-owned or leased vehicles		17,785	17,838	17,665	16,507	15,739
Scope 2: Emissions from purchased electricity inc	hicles					
Purchased electricity – generation	Market-based ⁽¹⁾	47.2 ⁽⁵⁾	32.9 ⁽⁵⁾	9.3(5)	4,201	11,789
	Location-based ⁽²⁾	140,847	136,183	126,813	134,492	164,521
Purchased electricity – vehicles	Market-based	31.1	6.8	1.7	<0.1	0
	Location-based	31.1	6.8	1.7	<0.1	0
Gross scope 1 and 2 emissions total	Market-based	124,418	134,239	133,757	135,936	138,961
	Location-based	265,218	270,389	260,561	266,226	291,693
Net emissions reductions						
Renewable electricity exported ⁽³⁾		-2,726	-3,101	-2,888	-4,317	-3,979
Biomethane exported	Location-based	-8,479	-8,439	-9,360	-10,283	-9,302
Green tariff electricity purchased ⁽³⁾	Location-based	-132,127	-136,162	-125,746	-133,197	-164,210
Net scope 1 and 2 emissions total	Market-based	121,693	131,138	130,869	131,619	134,982
	Location-based	121,887	122,687	122,567	118,429	114,202

(1) Market-based figures use emission factors specific to the actual electricity purchased. For electricity supplied on a standard grid tariff, we use CO₂e per kWh from suppliers' public fuel mix disclosures.

(2) Location-based figures use average UK grid emissions to calculate electricity emissions and are shown in green italics.

(3) Exported electricity emissions use the average UK grid emissions factor for both market and location-based totals.

(4) From 2023/24 emission factors use IPCC AR5 global warming potentials where CH₄ = 28, N₂O = 265. Earlier years use AR4 where CH₄ = 25, N₂O = 298.

(a) Emissions from electricity for recently adopted sites supplied on standard tariffs until they can be moved onto our corporate renewable contracts.

	2024/25	2023/24	2022/23	2021/22	SBT baseline
Scope 3 greenhouse gas emissions	tCO ₂ e	tCO ₂ e	tCO ₂ e	tCO ₂ e	2019/20 tCO2e
Category 1: Purchased goods and services ⁽⁶⁾	239,757	233,480	250,189	292,946	213,442
Category 2: Capital goods ⁽⁶⁾	106,250	99,962	138,182	112,498	128,286
Category 3: Fuel and energy-related emissions ⁽⁷⁾ Purchased electricity – well to tank and transmission and distribution Fuel (excluding electricity) – well to tank	46,383 7,820	46,536 6,653	44,704 8,742	50,020 8,928	38,865 6,397
Category 4: Upstream T&D – sludge transport ⁽⁷)	8	6	35	103	3,374
Category 5: Waste generated in ops: including sludge disposal ⁽⁷⁾	28,357	26,135	27,454	25,458	27,936
Category 6: Business travel: public transport, private vehicles and hotel $stays^{\scriptscriptstyle(7)}$	1,503	1,464	1,486	1,138	3,508
Category 7: Employee commuting and homeworking [®] Employee commuting Homeworking	4,676 572	4,631 505	4,974 361	2,990 1,076	2,405 1,703
Scope 3 total	435,326	419,372	476,128	495,158	426,039
Scope 3 SBT measure (excludes category 2)	329,076	319,410	337,946	382,660	297,753

(6) Categories 1 (excluding chemicals) and 2 use the latest Global CEDA (v7 for 2024/25) to estimate emissions based on the amount spent by spend category. CEDA is a multi-region, environmentally extended input-output database, that has global coverage and is a CDP recommended tool.

Ø Categories 3, 4, 5 and 6 use activity records and 2023 UK Government GHG conversion factors for company reporting.

(a) Category 7 uses EcoAct models to estimate emissions from employee commuting and homeworking based on company FTE figures and home, site, and hybrid working policies.

		2024/25	2023/24	2022/23	2021/22
Greenhouse gas emissions intensity		tCO ₂ e	tCO ₂ e	tCO ₂ e	tCO ₂ e
Gross scope 1 and 2 emissions per £m revenue	Market-based	58.0	68.9	73.3	73.0
Net scope 1 and 2 emissions per £m revenue	Market-based	56.7	67.3	71.7	70.7
Net water operational emissions per megalitre water $\ensuremath{treated}^{(9)}$	Location-based	172.1	177.6	101.4	106.9
Net wastewater operational emissions per megalitre sewage treated ⁽⁹⁾	Location-based	198.5	209.0	158.8	144.2

(9) UK water industry intensity metrics. The method for calculating these was redefined by Ofwat in 2024. Emission units are kg CO₂e.

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Scope 1 emissions

Wastewater and sludge processes cause over 70 per cent of our scope 1 emissions as the gases released, nitrous oxide (N₂O) and methane (CH₄), have much greater global warming potential than carbon dioxide (CO₂). Our wastewater process emissions are proportional to the population and the sludge produced, therefore emissions rise as population numbers increase. We believe the method all UK water companies use underestimates emissions, however, to address this, we have successfully obtained AMP8 net zero enhancement funding to monitor N₂O release, identify ways to improve the estimation method, and reduce or capture those emissions for beneficial use.

Scope 2 emissions

As all our contract purchased electricity is currently REGO backed, the only market-based scope 2 emissions are those from interim supply tariffs and from public and home charging of electric vehicles. Note we are currently reviewing our commitment to buying REGO certificates for all our electricity purchase.

Scope 3 emissions

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Most of our scope 3 emissions are in GHG Protocol categories 1 (products and services) and 2 (capital goods), the latter being the construction services we buy. With the exception of chemicals, we estimate these emissions based on the value of goods and

services bought and their spend category using a multi-region, environmentally-extended input-output database, Global CEDA v7. This provides an estimate that is determined by the scale and timing of our investments rather than our design or supplier choices. We are, however, increasing the use of sustainability as a criteria in both supplier and product selection and in parallel are developing ways to recognise the benefit of such management decisions on our emissions.

The next highest category is the indirect emissions from fuel and energy so switches to more efficient processes and the use of low carbon alternative fuels will reduce both scope 1 and 3 footprints.

Fuel and energy 15,922 tCO,e + 54,203 tCO,e

Fossil fuel use at our sites and the well-to-tank and transmission and distribution scope 3 emissions for all energy makes up 13 per cent of our net total footprint. Reducing our consumption and replacing such fuels with low emissions alternatives is central to our net zero transition plan. We intend to grow our renewable capabilities and play an active role in the development of new technologies such as hydrogen.

Transport 17,785 tCO,e

We have a growing infrastructure to support our fleet transition to low-carbon fuels. By summer 2025, we will have 400 electric vehicles and are exploring options to fuel HGVs, including hydrogen and HVO.

Sludge and biogas 36,260 tCO2e

Treatment of sludge produces biomethane. The majority of our facilities use advanced anaerobic digestion which captures more of this biomethane to power and heat our processes or generate electricity. This reduces methane emitted both during treatment and after disposal.

Wastewater processing 54,123 tCO₂e

The biological processes used in wastewater treatment produce N₂O and CH₄, both potent GHGs. Emissions are, approximately, proportional to the size of the communities producing the wastewater.

Gas losses 250 tCO₂e

GHG from refrigerants R410A and HFC134a.

5

Capital goods 106,250 tCO,e

We have a significant capital programme to develop our water and wastewater services infrastructure and this construction will produce substantial emissions.

Commuting 4,676 tCO₂e Homeworking 572 tCO,e

6

We use the numbers of colleagues, where they typically work (office, site or home) and the EcoAct's UK models to estimate emissions.

Business travel

1,503 tCO,e Public transport, including air, train, vehicles and hotel stavs.

Sludge transport 8 tCO₂e Contracted sludge transport.

Operational waste 28,357 tCO,e

Of these emissions, 97 per cent are from the disposal of sludge biosolids to agricultural land. UKWIR research shows that the industry estimation method is likely to be significantly overestimating these emissions.

Stock code: UU.

TCFD

Purchased goods and services 239,757 tCO₂e

Approximately 40,000 tCO₂e are from chemicals we use. As we estimate these emissions using the weight purchased and emission factors from published life-cycle carbon assessments we can identify the processes with the highest impact and influence operational decisions and research and development investment accordingly. For the rest of our purchased goods and services we use records of the amount we have spent and the environmentally extended input-output database, Global CEDA v7, to give us a comprehensive but indicative estimate.

