

Stimulus

Section III: Introduction to United Utilities

16

water companies in total

Water and wastewater companies

ANH: Anglian Water
WSH: Dwr Cymru
HDD: Hafren Dyfrdwy
NES: Northumbrian Water
SVE: Severn Trent Water
SBB: South West Water
SRN: Southern Water
TMS: Thames Water
Uuw: United Utilities Water
WSX: Wessex Water
YKY: Yorkshire Water

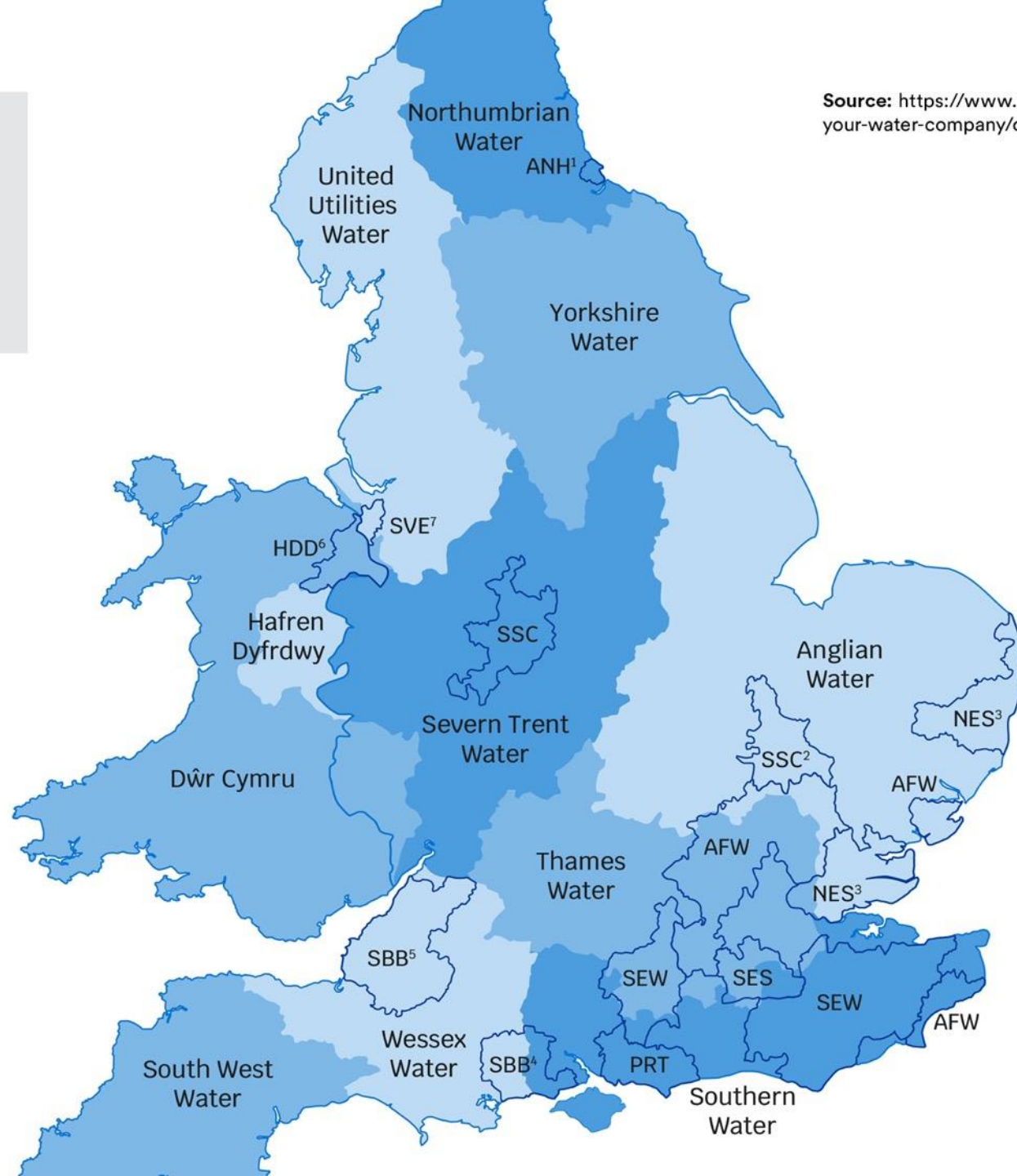
Water only companies

AFW: Affinity Water
PRT: Portsmouth Water
SEW: South East Water
SSC: South Staffs Water
SES: SES Water

Key

1. Water services provided under the Hartlepool Water name.
2. Water services provided under the Cambridge Water name.
3. Water services provided under the Essex & Suffolk Water name.
4. Water services provided under the Bournemouth Water name.
5. Water services provided under the Bristol Water name.
6. Hafren Dyfrdwy provides water services only in this area.
7. Severn Trent Water provides water services only in this area.

Source: <https://www.ofwat.gov.uk/households/your-water-company/contact-companies>



United Utilities: the North West region

3 million
household customers



200,000
businesses



830mm
rainfall each year, higher
than the UK average



34%
of the region is National
Park, Area of Outstanding
Natural Beauty or Sites
of Specific Natural Interest



7.4m
population, expected to grow
significantly in the next 25 years



5,000
people are directly
employed by United Utilities



88
water treatment works



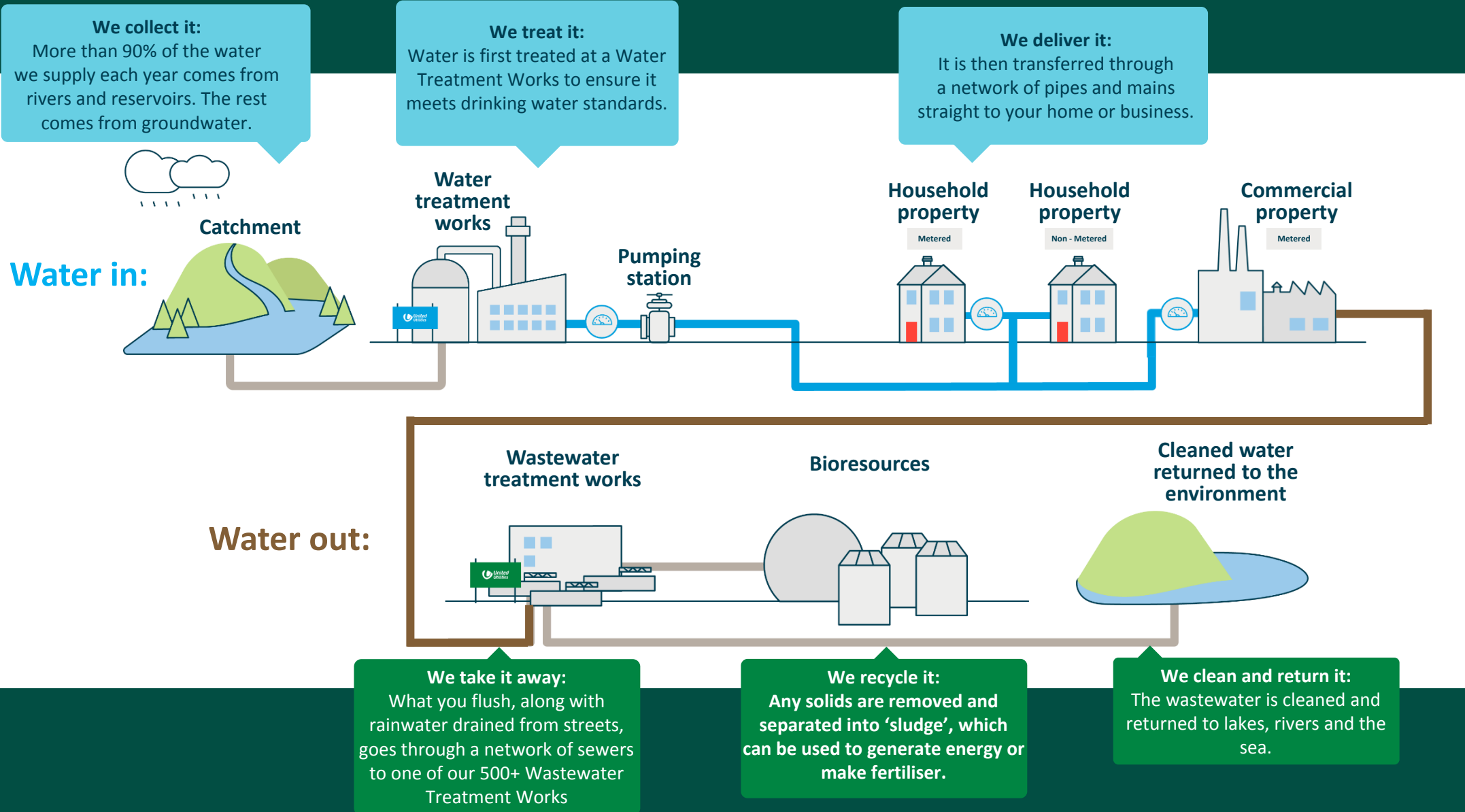
566
wastewater treatment works



22,700
North West jobs connected
to United Utilities work



The water cycle: getting water to you, and taking it away



Stimulus

Section V: Longer-term picture to 2050

So... what's the problem?

We need to ensure that customers have a reliable supply of clean drinking water and that wastewater leaves our treatment works clean, but there are pressures due to:



Population growth
in the North West



Climate change

Climate change is predicted to cause drier summers, which will affect our water supplies, but the frequency of heavy rainfall and storms has increased and is also predicted to increase further, which could cause sewers to flood onto land and in homes or could leave the system before it's been fully treated and enter lakes, rivers, and the sea.

United Utilities' longer-term plan for 2050

Managing increased water demand in the North West

Leakage reduction of 50% by 2050 from 2017-18 level

Reduce household consumption to 110 litres per person, per day by 2050

Substantially reducing sewer overflows

Reducing local harm to biodiversity from combined sewer overflows by 2050

Reducing spills from combined sewer overflows to no more than an average of 10 spills per overflow by 2050

Improving river water quality

Investing in better treatment of sewage to reduce harmful impacts on rivers by 80% by 2037

Achieving net zero greenhouse gas emissions

Net zero greenhouse gas emissions by 2050

Stimulus

Section VI: Recap on the pre-task information

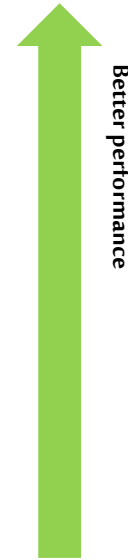
Water companies measured on the amount of water lost due to leaks from water mains and pipes

Number of litres lost per property per day.

Companies with the lowest numbers perform better.

United Utilities has not met its target for this metric last year

United Utilities are ranked 16th of 19 companies on this measure



Better performance



Poorer performance

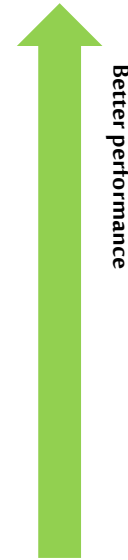
Company	Performance
Bristol	65.04
Northumbrian (Essex & Suffolk)	76.4
Portsmouth	77.02
SES Water	78.68
Anglian	80.18
Southern	83.17
South East	87.63
Cambridge	90.67
Wessex	103.29
South West	107.71
Northumbrian	108.3
Affinity	108.65
Severn Trent	110.35
South Staffs	113.45
Yorkshire	122.91
United Utilities	<u>124.21</u>
Hafren Dyfrdwy	146.09
Thames	151.51
Welsh Water	158.8

Water companies measured on the length of time properties are without water

Duration without water for more than 3 hours by minutes per property. **Companies with the lowest numbers perform better.**

United Utilities has not met its target for this metric last year

United Utilities are ranked 7th of 17 companies on this measure



Better performance



Poorer performance

Company	Performance
Portsmouth	00:02:21
Bristol	00:02:31
SES Water	00:02:58
South Staffs & Cambridge	00:03:15
Affinity	00:03:43
Wessex	00:04:12
<u>United Utilities</u>	<u>00:07:58</u>
Southern	00:09:22
Anglian	00:09:48
Yorkshire	00:10:38
Thames	00:11:03
Northumbrian	00:11:45
Severn Trent	00:12:39
South West	00:13:40
Welsh Water	00:16:12
Hafren Dyfrdwy	00:37:28
South East	01:12:33

Water companies measured on the number of customer contacts regarding the appearance, taste and smell of tap water

Number of customer contacts received regarding incidents, per 1,000 customers. **Companies with the lowest numbers perform better.**

United Utilities has not met its target for this metric last year

United Utilities are ranked 16th of 17 companies on this measure



Better performance



Poorer performance

Company	Performance
Portsmouth	0.41
Thames	0.49
SES Water	0.58
Affinity	0.73
South Staffs & Cambridge	0.76
Severn Trent	0.93
Northumbrian	0.97
Anglian	1.03
Yorkshire	1.09
Southern	1.1
Wessex	1.17
South East	1.34
Bristol	1.38
South West	1.55
Hafren Dyfrdwy	1.71
United Utilities	1.79
Welsh Water	2.38

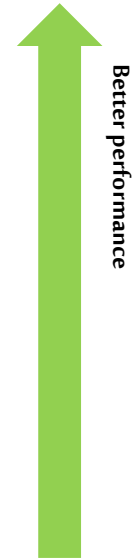
Water companies measured on the number of incidents of pollution of rivers and streams

Number of incidents per 10,000 km of sewer.

Companies with the lowest numbers perform better.

United Utilities has met its target for this metric last year

United Utilities are ranked 1th of 11 companies on this measure



Better performance



Poorer performance

Company	Performance
<u>United Utilities</u>	<u>17.71</u>
Wessex	20.60
Severn Trent	21.81
Welsh Water	22.90
Northumbrian	22.98
Thames	24.87
Yorkshire	27.36
Anglian	33.75
Hafren Dyfrdwy	39.84
South West	86.58
Southern	93.63

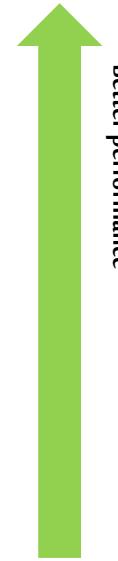
Water companies measured on the incidents of sewage flooding properties

Number of properties affected, per 10,000.

Companies with the lowest numbers perform better.

United Utilities has not met its target for this metric last year

United Utilities are ranked 9th of 11 companies on this measure



Better performance



Poorer performance

Company	Performance
South West	0.76
Welsh Water	1.36
Wessex	1.42
Severn Trent	1.61
Anglian	1.73
Northumbrian	1.84
Hafren Dyfrdwy	2.34
Yorkshire	2.83
<u>United Utilities</u>	<u>2.97</u>
Southern	3.04
Thames	3.46

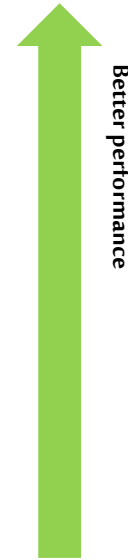
Water companies measured on the incidents of sewage flooding gardens or outbuildings

Number of properties affected, per 10,000.

Companies with the lowest numbers perform better.

United Utilities has met its target for this metric last year

United Utilities are ranked 4th of 11 companies on this measure



Better performance



Poorer performance

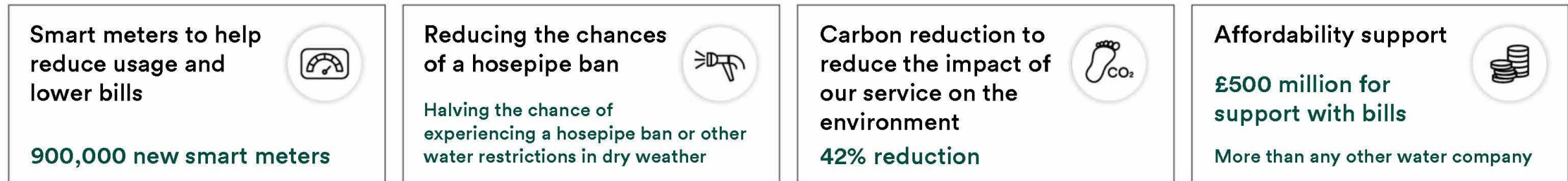
Company	Performance
Thames	9.4
Severn Trent	10.8
Anglian	14.55
<u>United Utilities</u>	<u>18.12</u>
South West	18.13
Hafren Dyfrdwy	19.05
Wessex	19.19
Yorkshire	19.52
Southern	19.53
Welsh Water	26.27
Northumbrian	26.64

Service improvements

United Utilities targets for 2030



Voluntary improvements set by United Utilities: targets for 2030



Stimulus

Section VII: Focus on
the shorter-term
picture (business plan)

A STRONGER NORTH WEST:



Proactively protecting our service against future challenges like climate change

- Investing £150m in pipes that are fit for the future
- Employing an inclusive and diverse workforce with 5,700 jobs
- Investing now to reduce the future impact of storms on the network
- Reducing the likelihood of future water restrictions
- Providing optional smart meters to help customers reduce water usage and bills. Smart meters also help towards detecting leaks and reducing wastage to protect the environment

A GREENER NORTH WEST:



Reducing water wastage and protecting and enhancing the North West's nature and ecosystems

- Reducing water wastage by 24% on our network and reducing usage
- Significantly reducing sewage water spills into water courses by 39%
- Investing in green, sustainable infrastructure that improves the lives of our communities in the long-term
- Protecting 475km of cleaner rivers to promote biodiversity and wildlife
- Planting a million trees
- Investing c.£195m to reduce carbon emissions by 42% through upgrading to processes with lower emissions and using renewable energy sources

A HEALTHIER NORTH WEST:



Proving additional social benefits to North West communities

- Continuing to provide great quality drinking water across the North West
- Restoring 14 coastal water areas in the North West used for wild swimming and water sports
- Restoring peatland and ecosystems for 500 hectares of land (equivalent to 700 football pitches)
- Leading the utility sector on supporting vulnerable customers with services tailored to their health needs
- Providing £500m of support to households so those struggling to pay have a discounted water bill. This is the largest amount of support ever offered by any water company

Wider statutory responsibilities

Environmental laws:

The services that water companies provide must comply with environmental laws in England and Wales, as well as UK or Welsh Government policy.

All water companies have a programme of work to meet these laws, including a Water Resources Management Plan (WRMP) and the Water Industry National Environment Programme (WINEP). These include:

- Reducing pollution of seas and rivers by sewage overflows.
- Not taking too much water from rivers and the ground.
- Making sure there is enough water available to protect the natural environment as well as providing a public water supply.
- Treating water and wastewater to a standard that does not harm the natural environment.

All water companies must produce a Water Resources Management Plan every 5 years which forecasts water supply and demand over a minimum period of 25 years.

Water companies must also meet legal requirements for the quality and safety of drinking water and protect reservoirs, treatment works and other sites to ensure they are safe and secure.

Storm overflow infrastructure:

When there is too much rainfall for sewers to handle, storm overflows allow rain water, mixed with sewage, to escape into a separate pipe which eventually flows into a river or the sea.

This helps to reduce the risk of properties being flooded with sewage.

There are around 15,000 storm overflows in England, of which 2,191 are in the United Utilities region.

Each company (in England) has a target set by Government to reduce the use of storm overflows:

- By 2035, water companies will have: improved all overflows discharging into or near every designated bathing water; and improved 75% of overflows discharging to high priority sites
- By 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm

Drainage & wastewater:

The Environment Act requires sewerage companies to produce Drainage and Wastewater Management Plans, which are set over at least 25 years. The plans consider how things like climate change and population growth affect current and future capacity of sewage and rainwater drainage networks. The plans require a lot of collaboration between sewerage companies and other organisations which work around flood risk, and river management.

Wider statutory responsibilities

Environmental laws:

The services that water companies provide must comply with environmental laws in England and Wales, as well as UK or Welsh Government policy.

All water companies have a programme of work to meet these laws, including a Water Resources Management Plan (WRMP) and the Water Industry National Environment Programme (WINEP). These include:

- Reducing pollution of seas and rivers by sewage overflows.
- Not taking too much water from rivers and the ground.
- Making sure there is enough water available to protect the natural environment as well as providing a public water supply.
- Treating water and wastewater to a standard that does not harm the natural environment.

All water companies must produce a Water Resources Management Plan every 5 years which forecasts water supply and demand over a minimum period of 25 years.

Water companies must also meet legal requirements for the quality and safety of drinking water and protect reservoirs, treatment works and other sites to ensure they are safe and secure.

This will add £47 in 2030 to the average household water bill.

Storm overflow infrastructure:

When there is too much rainfall for sewers to handle, storm overflows allow rain water, mixed with sewage, to escape into a separate pipe which eventually flows into a river or the sea.

This helps to reduce the risk of properties being flooded with sewage.

There are around 15,000 storm overflows in England, of which 2,191 are in the United Utilities region.

Each company (in England) has a target set by Government to reduce the use of storm overflows:

- By 2035, water companies will have: improved all overflows discharging into or near every designated bathing water; and improved 75% of overflows discharging to high priority sites.
- By 2050, no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause any adverse ecological harm.

This will add £33 in 2030 to the average household water bill.

Drainage & wastewater:

The Environment Act requires sewerage companies to produce Drainage and Wastewater Management Plans, which are set over at least 25 years. The plans consider how things like climate change and population growth affect current and future capacity of sewage and rainwater drainage networks. The plans require a lot of collaboration between sewerage companies and other organisations which work around flood risk, and river management.

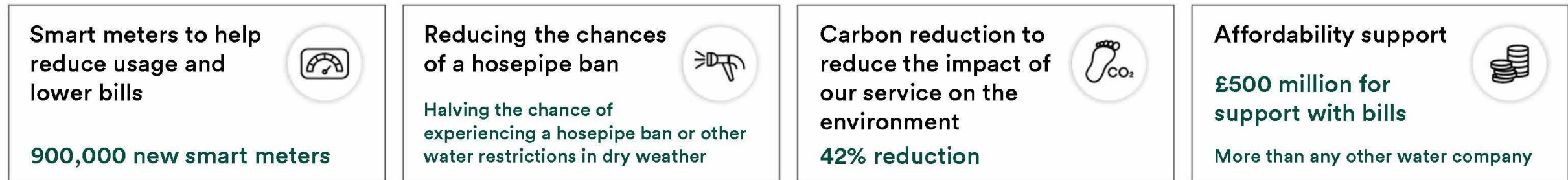
This will increase the average household bill in 2030 by £3.50.

Service improvements

United Utilities targets for 2030



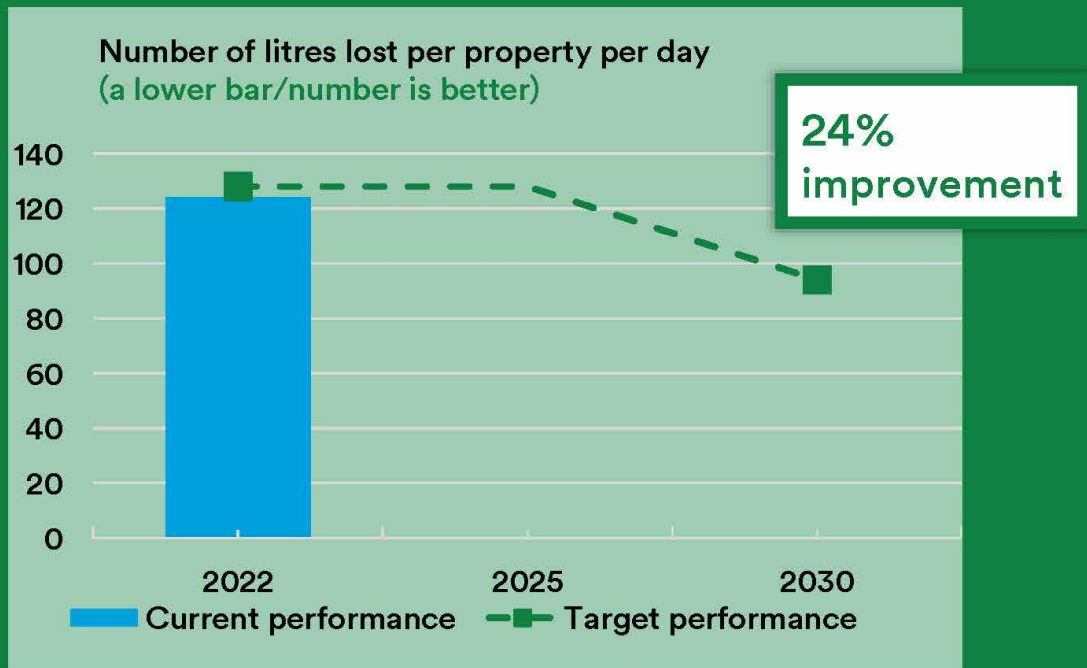
Voluntary improvements set by United Utilities: targets for 2030



Reducing the amount of water leakage



Leaks can affect customers directly if their water supply is affected. They are sometimes unnoticed if underground. But leakage is often seen in the media and has a cost to people on their bills and a cost to the environment.



2022 performance
124.21 litres a day

2030 target
94 litres a day

How does United Utilities say it will do this?

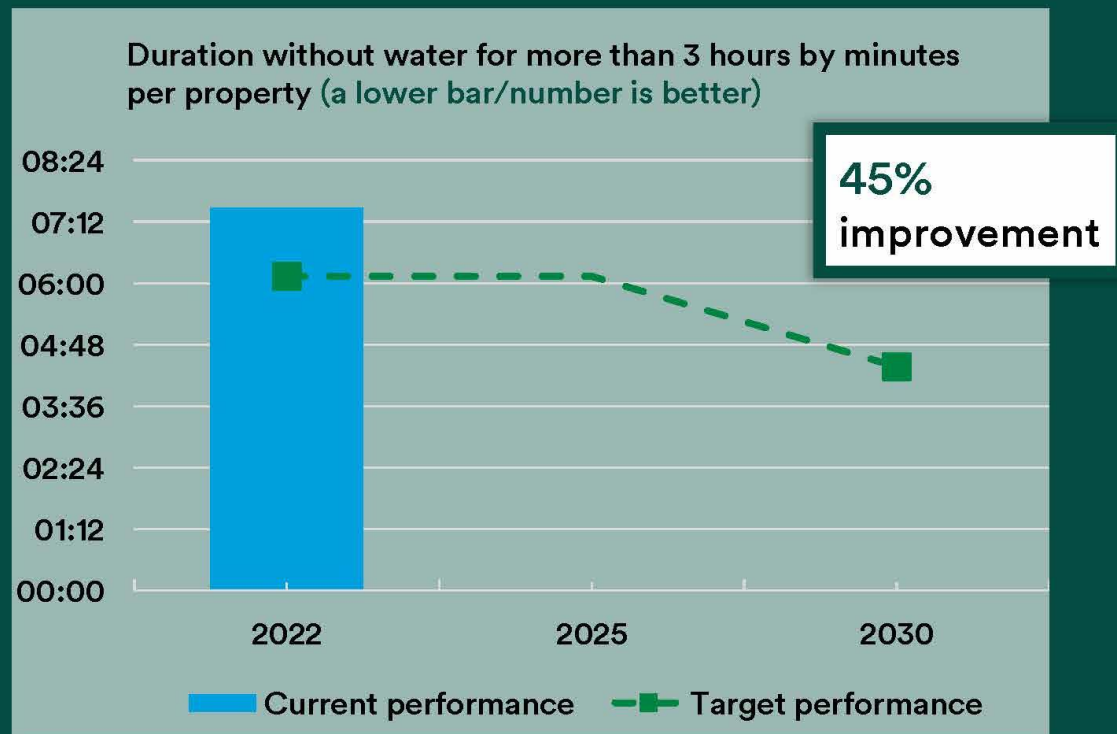
We are investing **£150m** in our pipes and pumps, including upgrading **695km** of water mains to reduce the chances of pipes leaking, interruptions to customers' supply or water quality issues.

We are also investing in improved leakage monitoring technology and smart water meters to help spot leaks on our network and customers homes and businesses early.

Reducing interruptions to your water supply



If a water supply is interrupted without warning for more than three hours, it will not be possible to draw water from the taps or flush the toilet; it may be necessary to buy bottled water.



2022 performance
7 min 58 secs

2030 target
4 min 22 secs

How does United Utilities say it will do this?

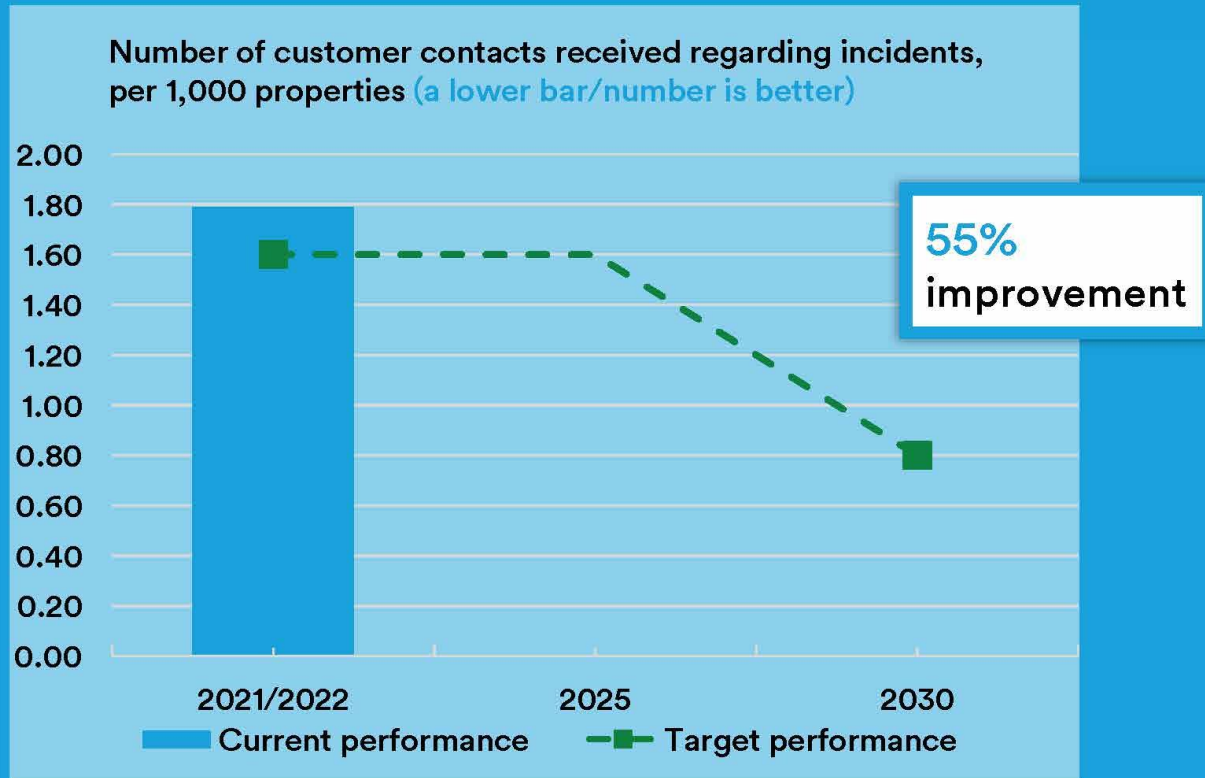
We are investing **£150m** in our pipes and pumps, including upgrading **695km** of water mains to reduce the chances of pipes leaking, interruptions to customers' supply or water quality issues.

We are improving our water treatment processes and installing innovative network monitoring technology. This will reduce the number of times your water supply is interrupted. We are also upgrading our power to reduce interruptions to service in the event of a storm or natural disaster.

Reducing the number of water quality issues customers experience



Tap water may look discoloured or taste/smell different to usual. Although still safe to drink, people may prefer bottled water as a precaution until it returns to normal.



2022 performance
1.79 complaints per
1,000 properties

2030 target
0.8 complaints per
1,000 properties

How does United Utilities say it will do this?

We are investing **£150m** in our pipes and pumps, including upgrading **695km** of water mains to reduce the chances of pipes leaking, interruptions to customers' supply and water quality issues.

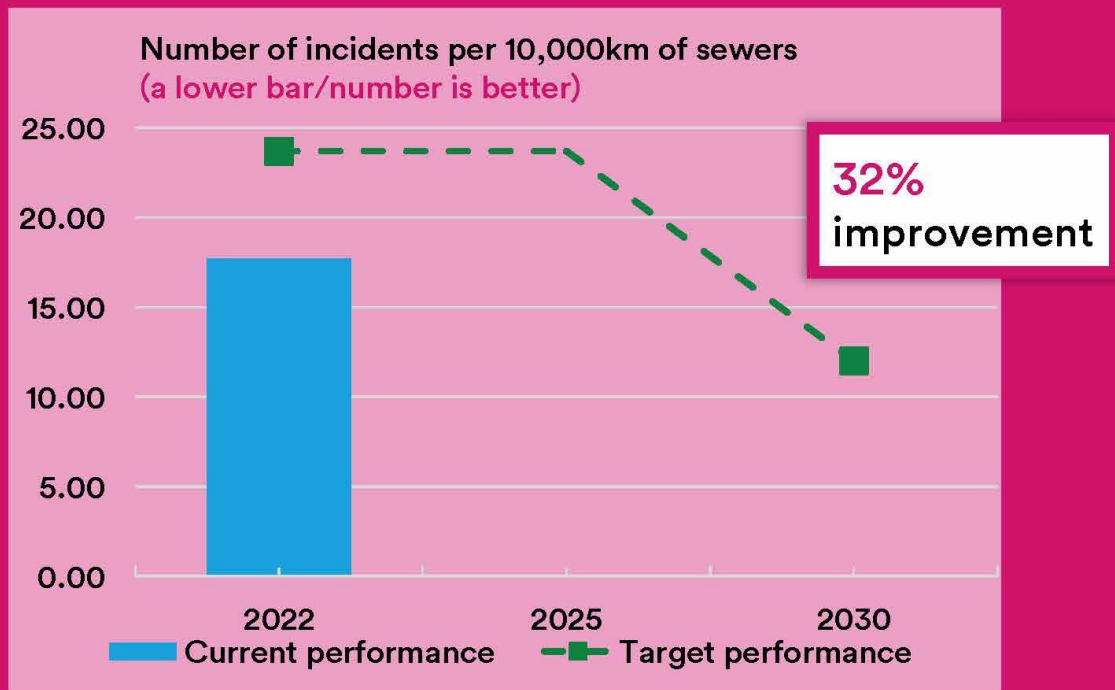
We will improve our water treatment processes and install innovative network monitoring technology.

This will prevent issues with taste, smell or appearance of drinking water and help United Utilities spot and fix issues before they occur.

Reducing the number of pollution incidents



Discharges from sewage treatment or networks can affect rivers and bathing waters. This can have a minimal effect on the river ecology or a major effect depending on the scale.



2022 performance
17.71 incidents per
10,000km of sewers

2030 target
12 incidents per
10,000km of sewers

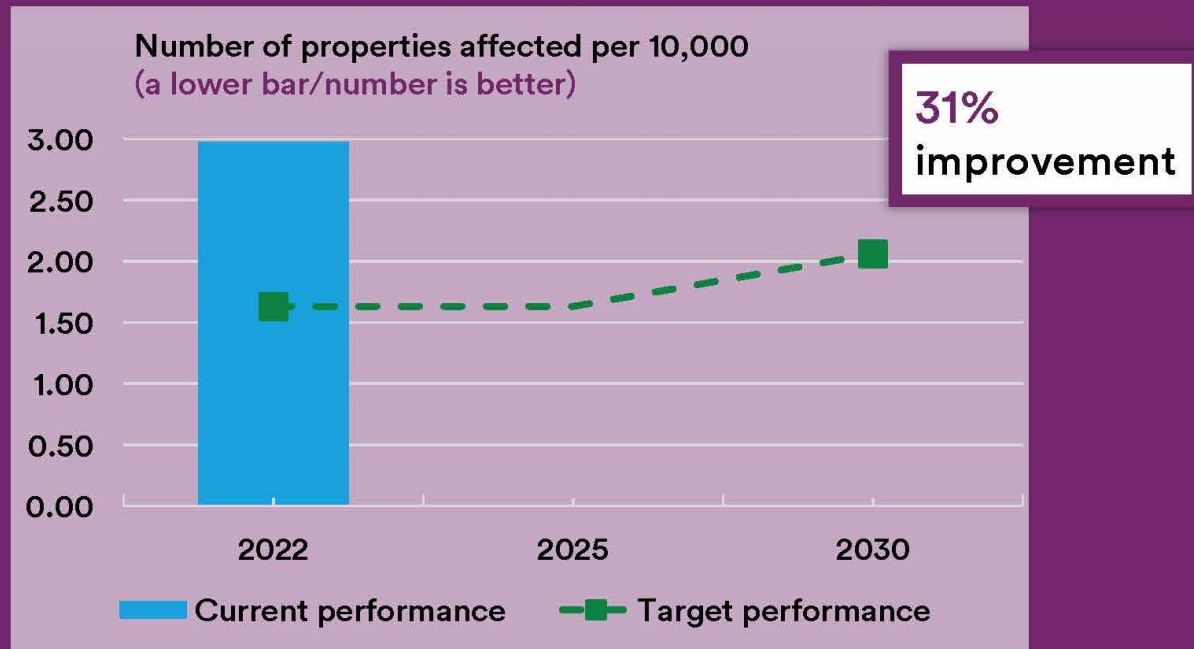
How does United Utilities say it will do this?

Discharges from sewage treatment or networks can affect rivers and bathing waters and have an effect on river quality.

The North West sewer network is vast and big enough to wrap around the earth twice. We plan to invest **£3bn** for better treatment of sewage and to increase the capacity of our **79,000km** sewer network, to support reducing the chances of pollution incidents occurring.

Reducing the number of properties affected by sewer flooding inside their property

An escape of sewage inside properties is highly inconvenient, disruptive and a potential health risk. In bad cases, people need to move out of their properties while things are put right.



2022 performance
2.97 events per
10,000 properties

2030 target
2.06 events per
10,000 properties



How does United Utilities say it will do this?

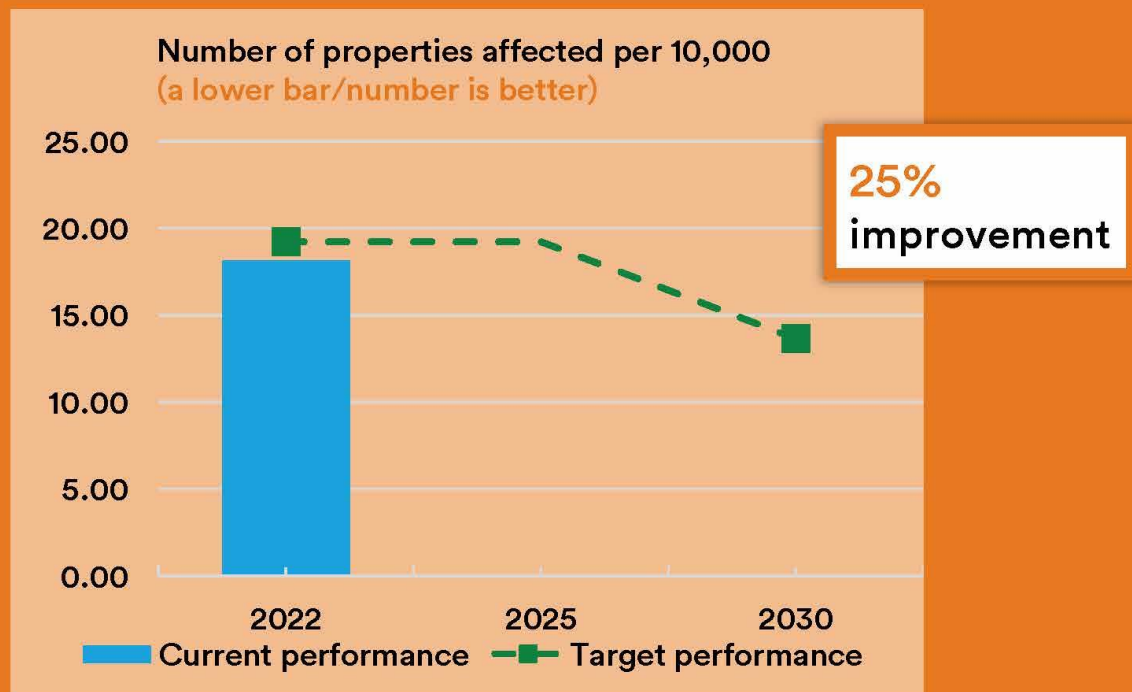
We know having your property flooded with sewer flooding is unacceptable.

We are investing to:

- Increase our sewer capacity and upgrading sewers so they are stronger and can hold more water and waste
- Deliver sustainable drainage solutions, as less rainfall entering sewers reduces the likelihood of them overflowing
- Install improved monitoring technology to identify and fix problems before they occur.

Reducing the number of properties affected by sewer flooding outside their property

An escape of sewage into gardens or access points to people's properties is inconvenient and unpleasant and can restrict access.



2022 performance

18.12 events per
10,000 properties

2030 target

13.65 events per
10,000 properties

How does United Utilities say it will do this?



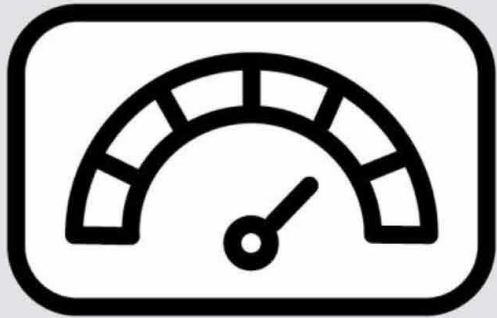
We know having your garden and other outside areas flooded with sewer flooding is unacceptable.

We are investing to:

- Increase our sewer capacity and upgrading sewers so they are stronger and can hold more water and waste
- Deliver sustainable drainage solutions, as less rainfall entering sewers reduces the likelihood of them overflowing
- Install improved monitoring technology to identify and fix problems before they occur.

Smart metering

Smart meters are water meters that give both you and United Utilities a live and accurate read-out of a property's water usage. This means you can see how much water you've been using, which can help customers to reduce their usage and lower bills. Currently, no customer properties have smart water meters.



900,000
new smart meters
in homes and
businesses

Target for 2030

Please note: Switching to a measured bill is completely optional for households.



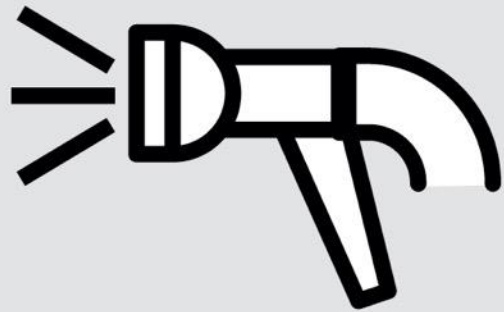
How does United Utilities say it will do this?

We are investing in replacing current meters with smart meters which can be remotely read. This enables homes and businesses to have greater visibility of their usage data, leading to reduced usage and reduced bills.

Smart meters also help us detect leakage in the network, and proactively detect other network issues so they can be prevented before customers experience them. All of this contributes to reducing water wastage and protecting the environment and our natural resources.

Halving the chance of experiencing a hosepipe ban between 2025-2030

Hosepipe bans are introduced when United Utilities' water reserves in reservoirs start to run low.



Halving the chance

Target for 2030



How do United Utilities say they will do this?

We are investing in improving water treatment processes and investing in new water sources to help us be more resilient in times of dry weather.

This will enable us to halve the chances a customer would experience a hosepipe ban or water restrictions now and in the future.

Carbon reduction to reduce the impact of our service on the environment

This relates to the greenhouse gas emissions released by United Utilities in the process of providing its services.

42%
reduction

Target for 2030*

The main sources of our emissions come from the energy and chemicals needed to move and treat huge volumes of water and wastewater and operational processes involved in treating the organic matter in sewage to make it safe to recycle back to the environment.

*Target refers to % reduction from a 2019/20 baseline figure.



How do United Utilities say they will do this?

A £195m programme of investment to lower emissions, for example by improving processes to treat water and sewage, moving away from fossil fuels and increasing our renewable energy.

We will also work in partnership to create woodland by completing our programme to plant a million trees and ensure peatland and ecosystems are restored to protect the environment.

Affordability support

Under the proposed plan, United Utilities would assign £500m towards a fund for struggling bill payers.



£280
million

Performance
in 2020–25



£500
million

Target
for 2030



How does United Utilities say it will do this?

We are investing to ensure there is a support package of £500m to provide discounted bills to customers who are struggling to pay for their water.

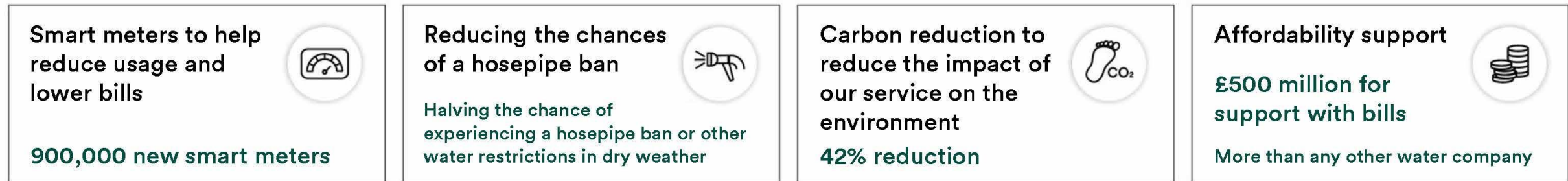
This is the largest support package United Utilities has ever offered.

Service improvements

United Utilities targets for 2030



Voluntary improvements set by United Utilities: targets for 2030



‘Must do’ vs. proposed plan

A ‘must do’ or least cost plan is United Utilities’ statutory plan (i.e. the plan they must deliver by law to meet their statutory requirements from 2025-2030). In United Utilities’ proposed plan, there would be some key differences:

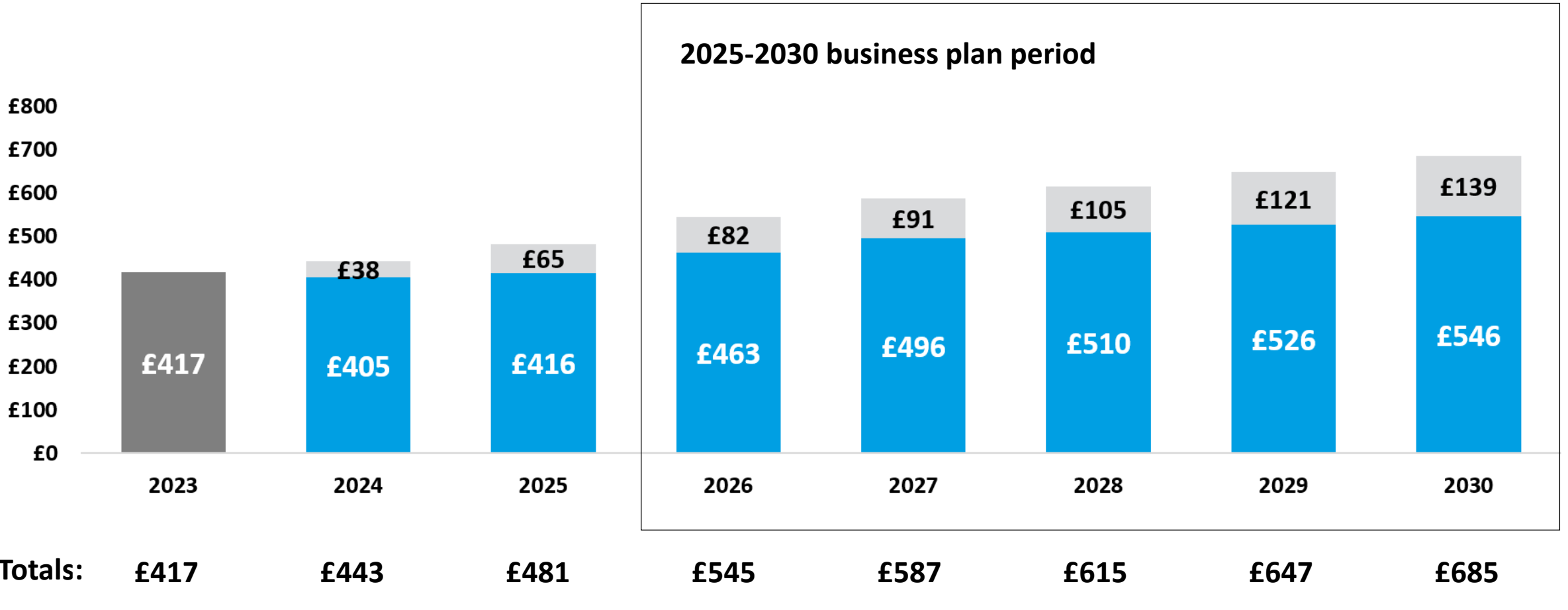
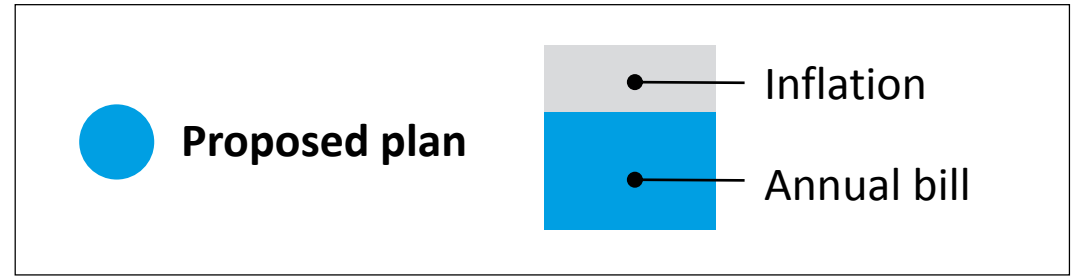
Under the ‘must do’ plan there would be a 21% reduction in leakage, rather than 24% as set out in the proposed plan.

There would be 825,000 fewer smart meters installed in homes and businesses (75,000 compared to 900,000).

There would be a 0% reduction in carbon emissions, rather than 42%.

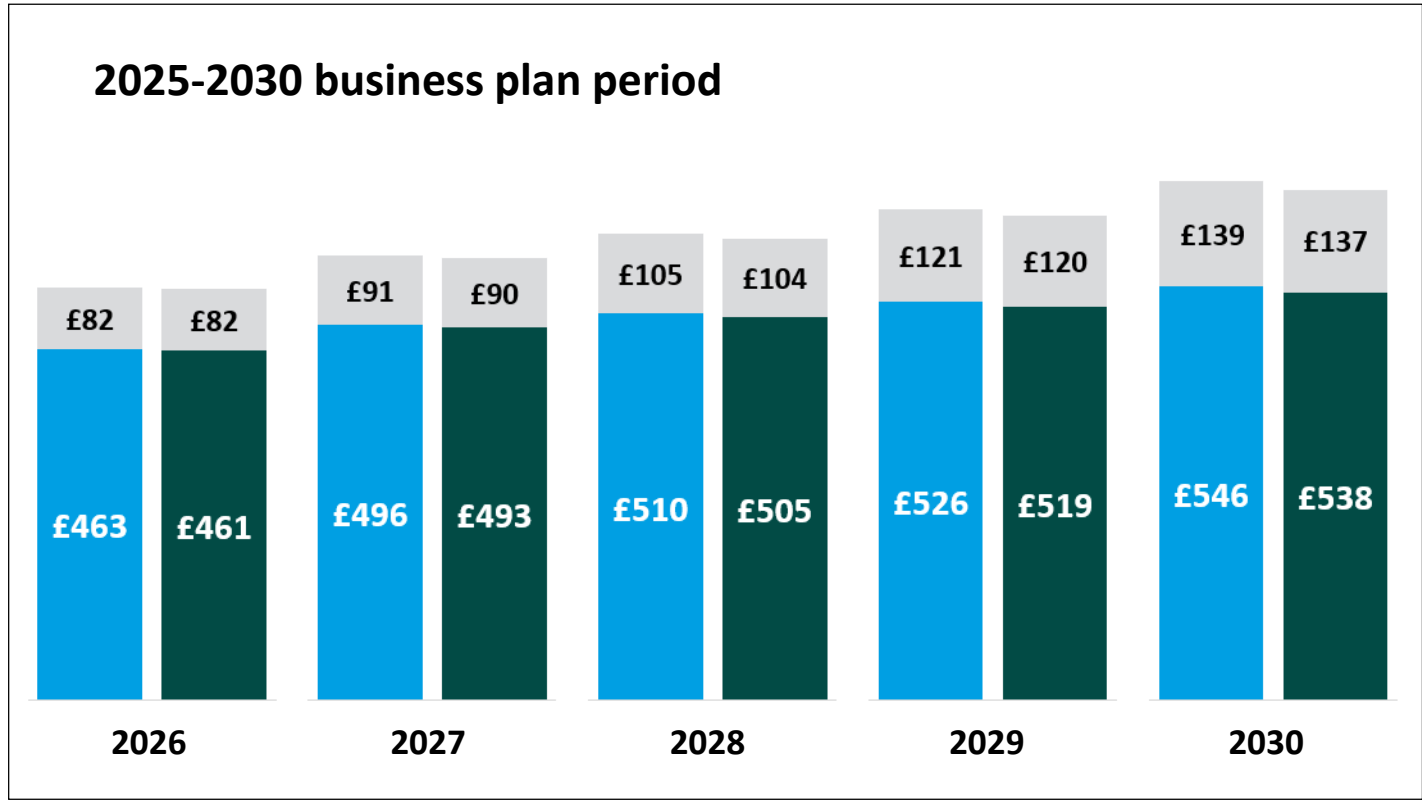
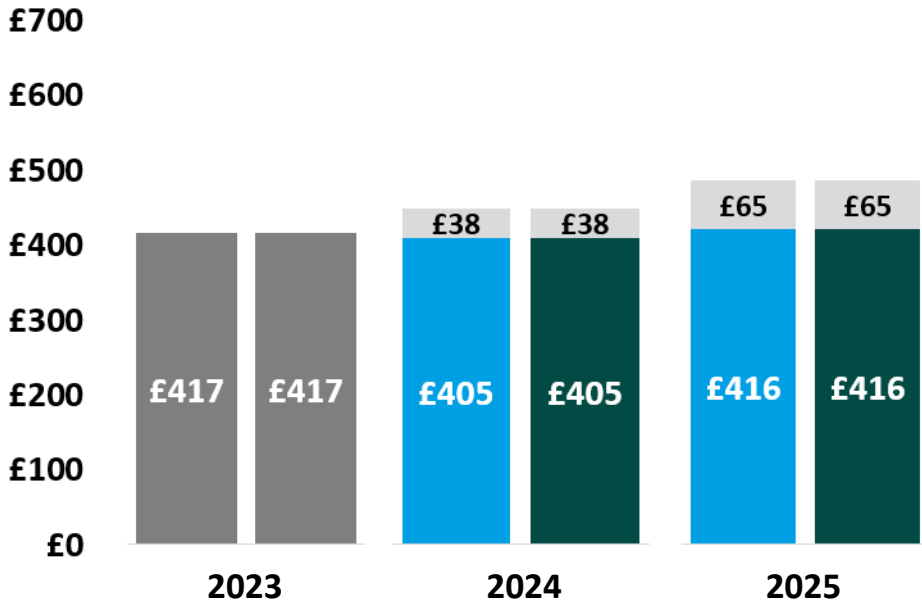
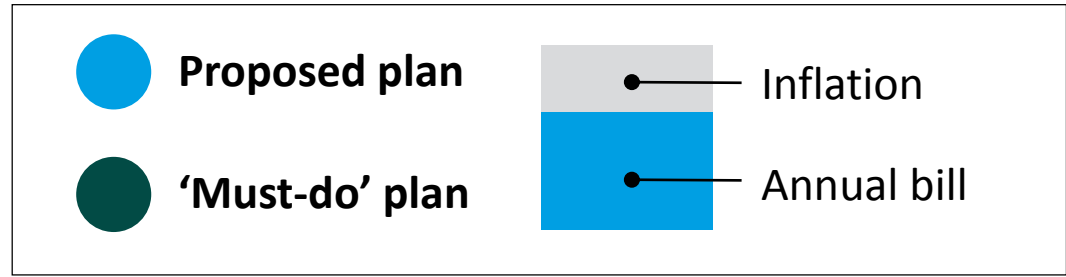
Proposed plan: annual bill impact

Average household retail dual bill, £/property



Bill impact comparison: proposed vs. 'must do' plans

Average household retail
dual bill, £/property



Totals: £417 £417 £443 £443 £481 £481 £545 £543 £587 £583 £615 £609 £647 £639 £685 £675

Phasing over time

	Option 1	Option 2	Option 3
Description	Investment is spread out across 2030 to 2050 to improve services, gradually improving levels of service	Investment is sooner to allow for improvements to services earlier	Investment is delayed, so service improvements happen later
What this means for bills	Bills will increase gradually from 2030 to 2050	Bill increases happen earlier, with a steep increase sooner and then hold steady	Bill increases happen much later with a steeper increase later on
What this means for service	Steady and gradual improvement to services from 2030 to 2050	Rapid improvement to services earlier, and then improvements hold steady	Little to no improvements to services until later on when investment is undertaken. Rapid improvement to services after this.