



Our shared vision for the future

Business Plan 2025-2030

NORTHUMBRIAN
WATER *living water*

ESSEX&SUFFOLK
WATER *living water*

Our plan highlights

Our plan has been discussed and shared extensively and we are pleased that 74% of our customers accepted the plan in our quantitative affordability and acceptability testing. We acknowledge, however, that 46% of our customers thought it would be ‘difficult’ to afford.

Working in partnership with all of those important voices, we have sought to recognise and respond to greater environmental concerns and standards, set stretching targets for service and efficiency, ensure that the plan is resilient, deliverable and financeable and importantly to make sure it is affordable for all.

Addressing the environmental challenges

We will:

- Invest c.£1.7bn (ten times the current approved level) to improve the environment.
- Eliminate serious pollution events and deliver a c.30% reduction in all pollutions.
- Continue to offer some of the cleanest bathing waters in the country while further improving North East beaches.
- Meet strict environmental targets – achieving a top 4* EPA rating.
- Reduce wastewater spills by about a fifth - focusing on most vulnerable locations.
- Use innovation and create catchment based communities to deliver nature-based solutions that reduce nutrients, maximising wider benefits to the environment.
- Work with communities to solve shared problems through partnership working such as the Northumbria Integrated Drainage Partnership (NIDP) and North East Catchments Hub.
- Improve habitats to support biodiversity.
- Continue to focus on operational emissions to meet the level of reductions in our our existing 2027 commitment and remain on track to achieve net zero by 2050.

Improving resilience and services to customers

We will:

- Provide unrivalled customer experience as we strive to be the ‘national leader’ focusing on those areas that matter most to customers.
- Maintain our position as number one in the industry for customer service.
- Reduce leakage by c.8% in Essex and Suffolk where we are already among the best in the sector and by c.10% in the North East.
- Deliver a c.19% reduction in supply interruptions, returning to our leading position.
- Deliver a c.25% reduction in external flooding, and maintain our top quartile performance in internal flooding continuing the improvements we are already making.
- Improve our performance in relation to drinking water quality through our ongoing transformation plan.
- Make sure water supplies are resilient to 1 in 500 year drought by investing c.£370m, particularly in Essex and Suffolk.
- Introduce compulsory metering in Essex and Suffolk, a serious water stressed area.
- Invest c.£400m to adapt to climate change and ensure healthy asset base, reducing the risk of service disruption for customers from extreme weather.
- Help our customers use water wisely and reduce consumption.

Delivering fair investment

We will:

- Invest over £6bn of private capital – more than double the current capital programme.
- For every £1 customers pay in their bills, we will spend £1.66 in the North East and £1.29 in Essex & Suffolk.
- Invest c.£400m in new equity injections.
- Return over c.£90m from our shareholders to customers if interest rates fall as forecast, assuming investors have been allowed a fair return.
- Accelerate c.£100m of investment into 2023-25 to deliver benefits to customers and the environment sooner - four times what Ofwat and Defra have allowed so far.
- Transform our business to enable us to deliver such a large programme and remain the top water company in England and Wales to work with according to the supply chain.
- Deliver c£400m of efficiencies from our position as one of the most efficient companies in the sector through ongoing improvements and leveraging new innovations.

Supporting customers and addressing affordability

We will:

- Eradicate water poverty – making sure nobody will spend more than 5% of their disposable income on water bills.
- Expand our support for all customers with affordability challenges from c.£40m in the current period to c.£170m – a more than four-fold increase in support.
- Double the number of households we are supporting with social tariffs from c.150,000 to 300,000.
- Introduce a new c.£20m shareholder-funded hardship scheme to help those that need it most.
- Phase investments to reduce the impact on bills in line with customer feedback balancing service improvements with affordability. North East customers will still pay the lowest water and wastewater bills in England.
- To deliver improvements to customers bills will need to rise by between 12-20% before inflation.
- In Essex and Suffolk water bills will need to rise by around 9-10 pence per day and in the North East combined bills will need to rise by between 19-21 pence per day. This is substantially mitigated by the 18% bill reduction we delivered in 2020, which was the largest reduction in the sector.

Contents page

Our Plan highlights

Navigating Our Plan

Welcome

- CEO welcome
- Statement from our Chairman

Water Forum statement

An overview of Our Plan

Introduction

- About us
- Our Purpose, vision and values
- How we perform
- Our track record

Addressing the environmental challenges

- Investing more for the environment
- Reducing spills
- Supporting biodiversity and wider public value
- Delivering net zero
- Restoring and regenerating our environment

02 Improving resilience and services to customers 22

- 04 Improving resilience in our water supplies 22
 - Improving resilience to climate change and ensuring healthy assets 23
 - Striving to be the national leader in the services we deliver to our customers 24

08 Delivering fair investment 26

- 09 Transforming to deliver future investment requirements 26
 - Driving efficiency and innovation for customers 29
 - Attracting private investment with fair returns 32
 - Driving growth in our local economies 33

14 Supporting customers and addressing affordability 34

- 16 Ensuring affordable services 34
 - Our approach to tackle water poverty 37
 - Supporting customers in vulnerable circumstances 39

18 Reflecting the views of our customers and stakeholders 40

- 20 How we have reflected the views of customers and stakeholders 40
- 21 What customers have said 41

Delivering our long-term ambitions 43

- Meeting our ambitious long-term targets 44
- Making sure our investments are ‘no regret’ 44

Our performance commitments 47



Tynemouth harbour

Navigating Our Plan

This plan is designed to be read in conjunction with a series of other documents.

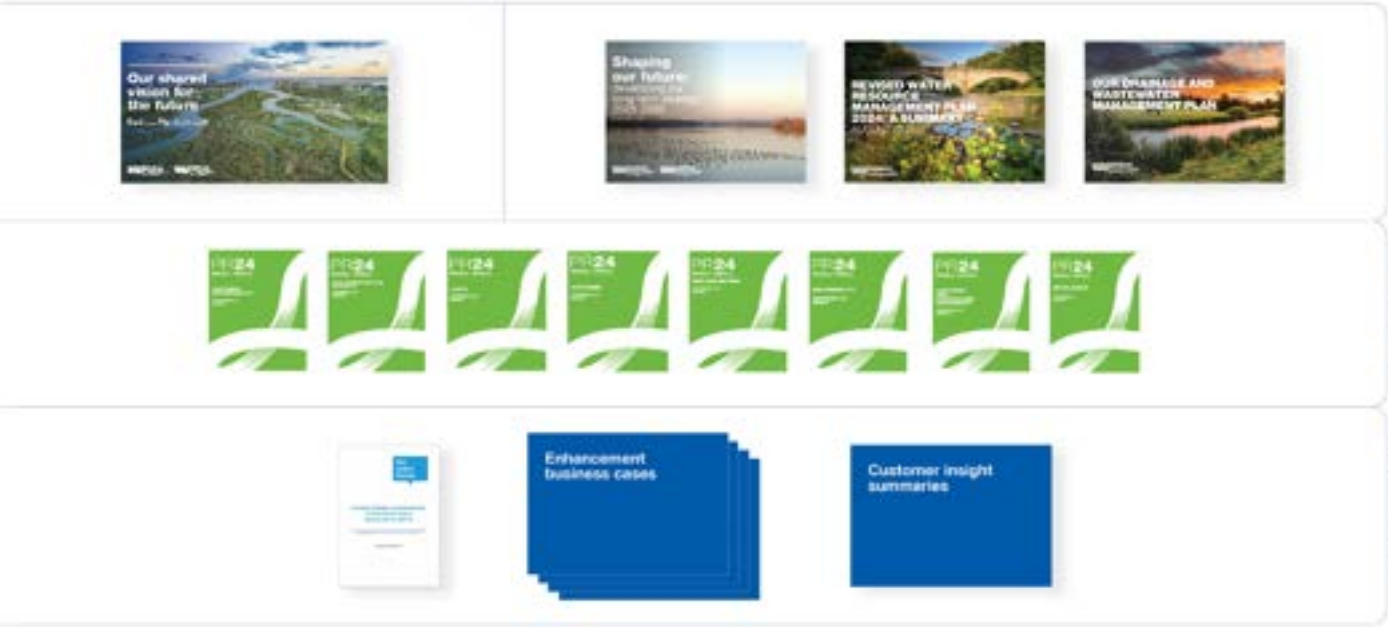
This is a shorter summary and there is more rich detail in the supporting appendices.

A guide to the plan (NES80) can be found [here](#).

For our Northumbrian Water customers, a short summary version of our plan (NES78) can be found [here](#).

For our Essex & Suffolk Water customers, a short summary version of our plan (NES79) can be found [here](#).

Figure 1: Document map

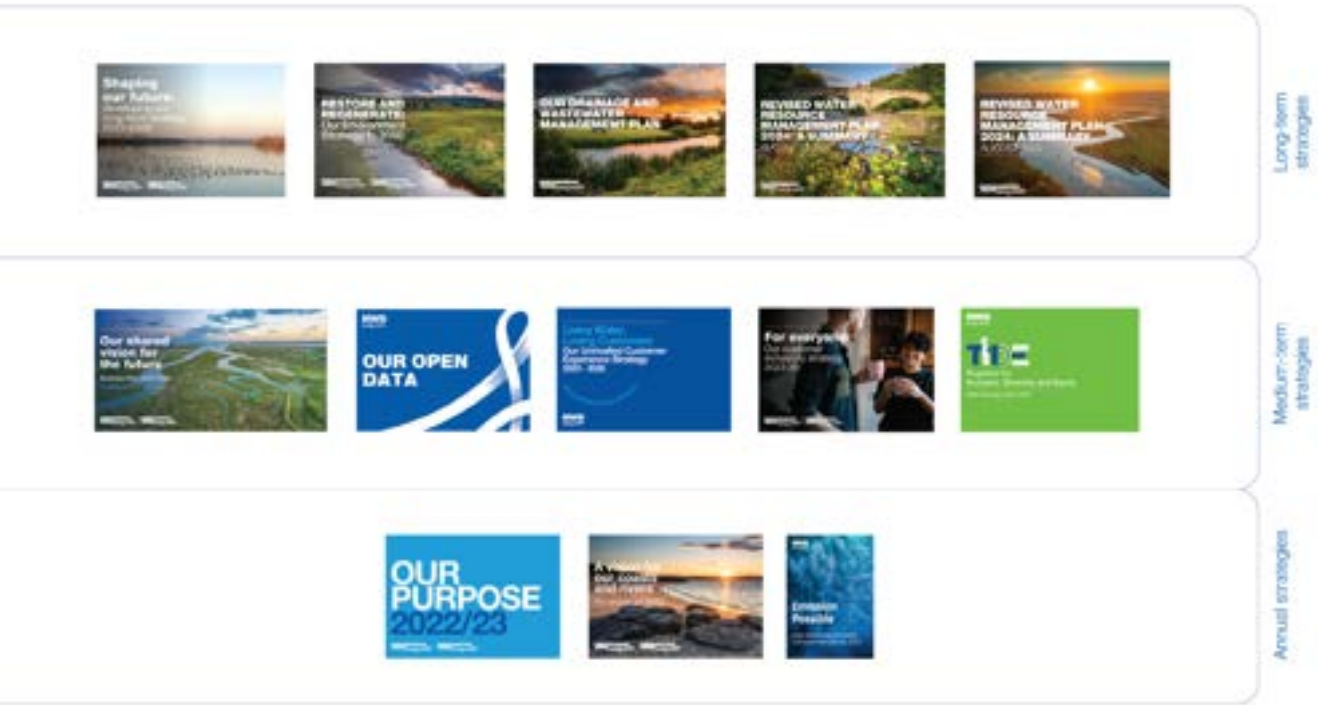


Supporting documents can be found [here](#).

To search this document for specific words or phrases press CTRL+F and enter your search term into the text box. The first match will be highlighted and the arrows can be used to navigate results.

We have also included links to help you find sections and to other documents you might find useful. [These links look like this.](#)

Figure 2: Our long-term strategies and plans



Welcome from our CEO and Board

CEO welcome



Heidi Mottram, CEO

Our drive to be truly purpose-led has resulted in a company that is proud to have the best customer service in the sector, and some of the highest levels of trust

We are never complacent and continue to challenge ourselves to go further, investing heavily and working hard to further demonstrate our track record for protecting and enhancing the environment, with some of the highest standards for bathing water quality, the cleanest rivers, and the lowest levels of pollution.

Because of our ethos and ethical culture, we are especially disappointed that water companies have come under fire for polluting rivers and coastal areas.

Concerns have grown over the environmental sustainability of water extraction and there are worries some practices may be damaging ecosystems. Questions have also been asked about whether the balance is right between the interests of customers and investors. These are all important issues to be debated and resolved.

We acknowledge that we need to move faster on reducing spills to the environment. We understand the scale of transformation that will be required and are determined to deliver our most ambitious plan yet.

Over the last ten years, we have had a particular focus on digital transformation and innovation, working in partnership with thought-leaders, which means we are in a good place to meet the challenges the industry faces. Using our proven partnership approach we will relentlessly pursue the solutions that best benefit the environment in the round.

We must have ambitious plans for customers and the environment but they must be deliverable otherwise we risk further damaging customer trust.

We recognise that we have reached an inflection point as a sector and that we need to do more and move quickly to address these concerns.

We also need to acknowledge that these are long-term problems that we will not be able to fix overnight. Our customers demand and deserve reliable high quality drinking water and safe bathing waters, so our long-term plan centres on building capacity and capability to deliver a relentless focus on improving resilience.

Stakeholder expectations are changing, and will continue to change, and we must understand and anticipate what our customers want regarding service, resilience and the environment. We have spent the last two years understanding the ambition of our customers, the Government, and other stakeholders on these issues, developing and consulting on how we should play our pivotal role in navigating such challenging times.

Our plan reflects our goal to be the national leader in the provision of water and wastewater services, which we remain committed to. We note that on average, the sector is having to spend significantly more than was allowed in prices at the last review and receiving service penalties; almost no company is currently meeting Ofwat's targets. We believe that targets should be stretching but achievable.

We see the next few years as a step-change: the largest investment programme in the last 30 years including significant new shareholder investment of

c.£400m and a continued commitment to support our local communities. We know we need to transform our organisation to deliver improvements in service levels, help to address wider global environmental challenges, and maintain confidence in us as the most trusted water company in England.

These new investments drive a significant increase in bills across both of our areas and we wholeheartedly recognise the public's concerns about rising bills – for some of our customers this will be incredibly difficult and we will focus our efforts on those who need it most.

Our support for customers will more than quadruple to c.£170m, including a new, c.£20m hardship fund, funded by our investors. Our plan will double the amount of households we are supporting with social tariffs.

Our short-term investment will be focused on 'no regrets' projects – repairing and replacing the key priority assets at water and wastewater treatment works, replacing more ageing water mains and protecting equipment from flooding and power failures in storms. We have already started bringing forward investment to make sure we are in the best possible place to deliver such a significant programme through a major acceleration of work and building the supply chain capacity that we will need.

Attracting some c.£3.6bn of new private capital investment is not trivial. A fair return for investors will need to be available or that investment will not be forthcoming and we will not be able to deliver the benefits it unlocks for customers and the environment.

We will continue to support customers to change some of their behaviours and reduce their water consumption for the sake of the environment and future generations. This is a partnership; we are all citizens together. We promise to get the basics right and rectify things quickly when they go wrong, take responsibility, and offer compensation when appropriate.

Our Business Plan for 2025-30 lays out ambitious goals for upgrading infrastructure, enhancing sustainability, and continuing to raise the bar on service quality. We aim to emerge as an even more customer focused, environmentally-conscious industry leader. There are certainly challenges, but they present opportunities to create lasting positive change. We know the journey will require focus and persistence, but remain dedicated to creating a brighter future for all we serve.



Heidi Mottram CBE
CEO

Statement from our Chairman



As a water company, we intrinsically rely on a healthy natural environment to provide water for our customers.

Over the last few years we have embraced evolving business challenges and industry issues by devising strategies to enhance standards, lead, and support our local regions and communities.

In 2021 we redefined 'Our Purpose' as a business following a detailed process of engagement with our stakeholders, customers, the Water Forum (the independent customer challenge group for NWL) and our Board. We defined this Purpose to reflect both how deeply we care about the communities that we serve and the local environment we must work in, as well as our strong desire to focus on the long-term reflecting the very long lives of some of the assets that we must manage and maintain.

Since 2020 we have seen significant public and media attention focused on the sector for all the wrong reasons. In particular widespread concern about sewage spilling into the environment and in the summer of 2022 droughts hit the country requiring other companies to introduce restrictions on water use. Left unchecked these negative perceptions can damage the levels of public trust and confidence in us and the essential services we provide.

Regulators should seek to strike a good, long term, balance between affordability, necessary investment, and service standards. Together we need a shared vision to deliver the essential services we provide.

Our [Long-term strategy](#) (NES_LTDS) sets our ambitions for 2050. We will deliver major improvements in our local environments, including reducing the amount of water we take from the environment and eliminating our pollution impact on rivers.

By providing capacity for growth we will improve the quality of life in the local communities that NW and ESW serve. The services we provide should be affordable and we will make sure there is enough support for customers so that no household spends more than 5% of their income on water bills.

And we will do all of this while continuing to provide reliable, high-quality water and excellent customer service.

As a Board we have scrutinised and challenged NWL's plans to make sure they are robust and the company can deliver on its promises to the regulators, stakeholders and our customers.

NWL has made sure that the Board has been fully involved and central to making decisions – including making sure that that we create and apply the right assurance on the systems and processes for developing our Business Plan.

The rigorous and expert challenge and persistence shown by the Water Forum has been critical in developing this plan and the Board thanks them for their diligence and dedication in that regard.

We also challenged whether there is the right level of stretch and ambition. It is important that stakeholders, including Ofwat, can have confidence in the information presented and the decisions taken. The resulting investment requirements represent a prodigious increase in the amount of private capital that will be needed in the business.

Shareholders understand their obligations and provide the following statement in support of the financeability of the Business Plan:

“As the ultimate controllers of Northumbrian Water Limited, we have received a range of forecasts from management over the past 12 months, highlighting the potential size of equity investment that may be required to support the AMP8 investment programme. We are aware of the Board’s obligations under condition P of the licence including to ensure NWL has sufficient financial resources to enable it to carry out its functions in a sustainable manner and our obligations as the ultimate controllers of NWL. The final size of the programme will be set by Ofwat’s PR24 Final Determination, which is expected to be issued in around December 2024 with a Draft Determination expected in May-June 2024.

As part of FD24, Ofwat will also be setting the final allowed return, cost allowances, service performance targets and incentives that will be available to companies. These decisions made by Ofwat will play an important role in how the investment committees of each shareholder will evaluate any such PR24 equity investment proposal. As global investors, the shareholders are not limited to investing only in the UK, nor just the water sector and have respective fiduciary duties to their ultimate investors with respect to return and yield which will be considered for any new commitment of equity. Each shareholder confirms that the ongoing financial resilience of Northumbrian Water is of significant importance to them, and subject to the approval of each shareholders’ investment committee, support will be provided on its merits in each case.”

CKI and KKR

In seeking to challenge and assure management’s plans we set a series of high-level questions that would need to be satisfied to provide a Business Plan of the highest possible quality and ambition.

Our board can confirm that the Business Plan materially meets Ofwat’s assurance requirements. We have used Ofwat’s ‘early view’ of the cost of capital involved in setting the Business Plan as we were required to do so. While analysis confirms that this will be financeable to debt investment we do not consider it will be financeable to equity. When so much new private investment is required we could not see how the return available could be less than that available in debt markets.

Therefore, we have followed our own ‘alternative’ assessment of the allowed return in our Plan closely following the CMA’s well considered previous redetermination. Under this alternative we are confident that our shareholders would be able to provide the c.£400m of new equity investment required.

As we look to the future, our focus remains on delivering the high-quality, resilient and sustainable water services that our customers and communities deserve. The Board will maintain diligent oversight to ensure plans stay on track.



Andrew Hunter
Chairman

The full board assurance statement can be found in [A2: Data, information and assurance \(NES03\)](#).

Water Forum statement



The Water Forum is Northumbrian Water's Independent Challenge Group (ICG) – the 16 members are from a broad range of backgrounds and organisations.

Our collective wealth of experience means we are well positioned to add value to the company and its customers, during both business planning and delivery.

Our role, structure and membership has evolved since the last Price Review (PR19), because Ofwat's requirements of us were different and much less prescriptive for this one (PR24). Over a 15-month period we commented and challenged on the emerging Business Plan as the company developed its proposals; and provided challenge and an assurance report about customer engagement specifically.

NWL's team was clear that they wanted us to help them create a good plan for customers, so we agreed to consider a range of questions that they were also asking of themselves. As the aim was to help the company to develop a better plan, we commented and challenged on three drafts, including the most recent one that was shared with us at the end of August.

We examined areas including how this Business Plan fits with the company's long-term strategy; and the affordability of the plan for customers, particularly those struggling to pay. Water companies have an important role to play in wider social priorities, including the environment and climate change – and this was another area we explored with NWL as it developed and refined its plans. Among others, the crucial topics of climate change resilience, nature-based solutions and carbon net zero all featured in our discussions and challenges.

We appointed a technical expert to look at how stretching NWL's service proposals were, and how it was proposing to use innovation and efficiency to deliver best outcomes for customers.

Also, with the sheer scale of investment required by the regulators over the next five years, we probed into these investment proposals to seek opportunities for the company to make them robust, deliverable and the best option for customers.

The company aimed to create a Plan that would listen to and meet the needs of customers by building on high quality and effective research and engagement. Our Customer Engagement Panel (a sub-group of the Water Forum) was tasked with helping to assure and improve the quality of the activity; and with challenging how the findings were interpreted and applied.

Of course, in the end, it has been for the Company to determine how its final Business Plan best meets the needs of its customers. Our role was to examine the emerging policy and project proposals (generally at an early stage rather than in their final form), challenge thinking and give a view where we can, and within the constraints of the time and materials available to us.

The team at NWL was very open to scrutiny – this is not always a comfortable process, but by engaging positively and encouraging tough challenge, we believe that NWL aimed to build as good a Business Plan as it could, in very challenging circumstances; and we very much welcome the opportunity to have been involved.

Melanie Laws
Chair of the Water Forum

The full Water Forum report (NES47), including a list of challenges they raised and responses from NWL can be found [here](#).

Alongside that report you can also find the independent expert reports from:

- [The Customer Engagement Panel \(NES46\)](#), which challenged our approach to customer engagement.
- [The Technical expert \(NES48\)](#) who challenged the service levels, cost efficiencies and some of the enhancement investments in the plan.

An overview of Our Plan

- ★

 - **Most ambitious plan ever** - enabling step changes in service and tackling national challenges like leaks, pollution, and resilience.
 - **Largest investment programme** - over £6bn to drive real improvements for customers and environment.
 - **Shareholder contribution** - c.£400m new equity injections and £20m in affordability support.
 - **Rising bills** - bills rising to £1.27-£1.29 per day in the North East, 79-80 pence per day in Essex and Suffolk, an increase of 18-20% and 12-14% respectively to fund critical investments. The North East will still have the lowest bills in the country.
 - **Eradicating water poverty** - committing to ensure no household pays more than 5% of its income on water with a more than four-fold increase in financial support.
 - **c.£400m efficiency savings** - keeping bills as low as possible through business efficiencies.
 - **Improving service** in line with customer priorities and our vision to be the national leading water company.
 - **74% of customers accepted our plan.**

In this critical moment for the water sector, this is our most ambitious Business Plan ever - enabling step changes in service performance for our customers, making real progress against wider national challenges and meeting new obligations such as to reduce spills to the environment, pollution, leakage and improve resilience to climate change.

To deliver such an ambitious plan we need a relentless focus on delivery and to work with others in partnership to achieve wider goals¹. Our plan sets out the largest investment programme we have ever delivered, with c.£3.6bn capital required to drive real improvements for customers and the environment.

Bills will need to rise by 19-21 pence per day or £71-£77 per year in the North East, or by 9-10 pence per day or £32-£36 per year in Essex and Suffolk, an increase of 18-20% and 12-14% respectively to fund critical investments. We also need to work with customers to help them use less water and [stop using their toilets as bins](#).

¹ Customers support our use of partnership working and the adoption of nature based solutions – 2022, Draft DWMP Summary

Figure 3: Our preferred plan - where is each customers’ money going?



We recognise as a company that any rise will be especially unwelcome for those customers who are already struggling to pay their bills at this difficult time as 47-52% of our household customers told us that the plan would be difficult to afford². That is why our plan has carefully considered the phasing of investments between the 2025-30 period in line with customer preferences. We have challenged government and regulators where their requirements were driving significant affordability challenges that did not appear cost beneficial for customers, we have given customers’ choices whenever we could about what investments they wanted to see in their plans, we have removed elements from our plans whenever they were not supported by customers and sought partnership solutions. Overall these actions have reduced the amount of investment in our plan by c.£300m from what it otherwise might have been and we hope that ongoing work will enable us to reduce the cost of the plans even further.

But we recognise that our plan still represents a significant increase in bills. That’s why we have committed to eradicating water poverty and making sure that no household spends more than 5% of its income on their water bill.

2 In our Affordability and Acceptability testing quantitative research 47% of our household customers in Essex and Suffolk and 52% of our household customers in the North East stated that the plan would be “difficult” to afford. 2023, NWL A&A Testing quantitative research, page 45

We can only deliver this by driving around c.£400m of additional efficiencies across the business from an already strong efficiency position across the sector through unprecedented innovation. We are also expanding our affordability support with a more than four-fold increase in the financial support we offer customers - rising from c.£40m between 2020-25 to around c.£170m between 2025-30.

Sharing the burden

Customers also cannot bear all of the burden at this difficult time. Shareholders will invest around c.£400m on behalf of customers to enable these necessary improvements. For every £1 we take from customers in their bills, we will spend £1.66 in the North East and £1.29 in Essex & Suffolk. Shareholders will also offer a new c.£20m hardship scheme to support those customers who are struggling the most³.

All of this new investment will require a fair return and under our proposals over c.£90m will be returned to customers if interest rates fall as is forecast.

We will reinvest any outperformance of our capital maintenance funding should we deliver the plan for less than we request.

3 This also reflects feedback from customers that shareholders needed to provide more support. 2023, Pre-acceptability – Part B and 2023, NWL A&A Testing qualitative research

Focusing on customer priorities

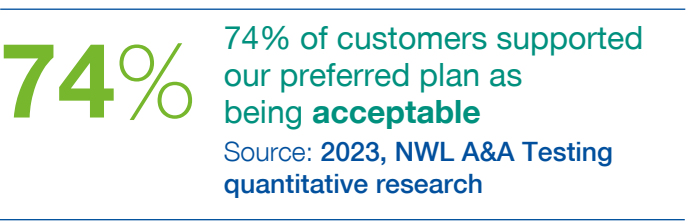
Our plan improves service performance in areas that matter most to our customers when we triangulated customers’ prioritisation for improvements to common performance commitments.

In our Affordability and Acceptability Testing (A&A) quantitative research 70% of our household customers and 83% of our non-household customers in Essex and Suffolk and 72% of our household customers and 81% of our non-household customers in the North East stated that the plan was acceptable⁴.

During the qualitative phase of A&A Testing, the most common reasons for participants accepting our proposed plan were the ‘Plan is good for future generations’ and ‘Their plan focuses on the right things’⁵.

During the quantitative phase of A&A Testing, the most common reasons for participants accepting our proposed plan were the ‘I support what they are trying to do in the long term’ and ‘Their plans seem to focus on the right services’⁶.

4 2023, NWL A&A Testing quantitative research, page 62
5 2023, NWL A&A Testing qualitative research, page 158
6 2023, NWL A&A Testing quantitative research, page 67



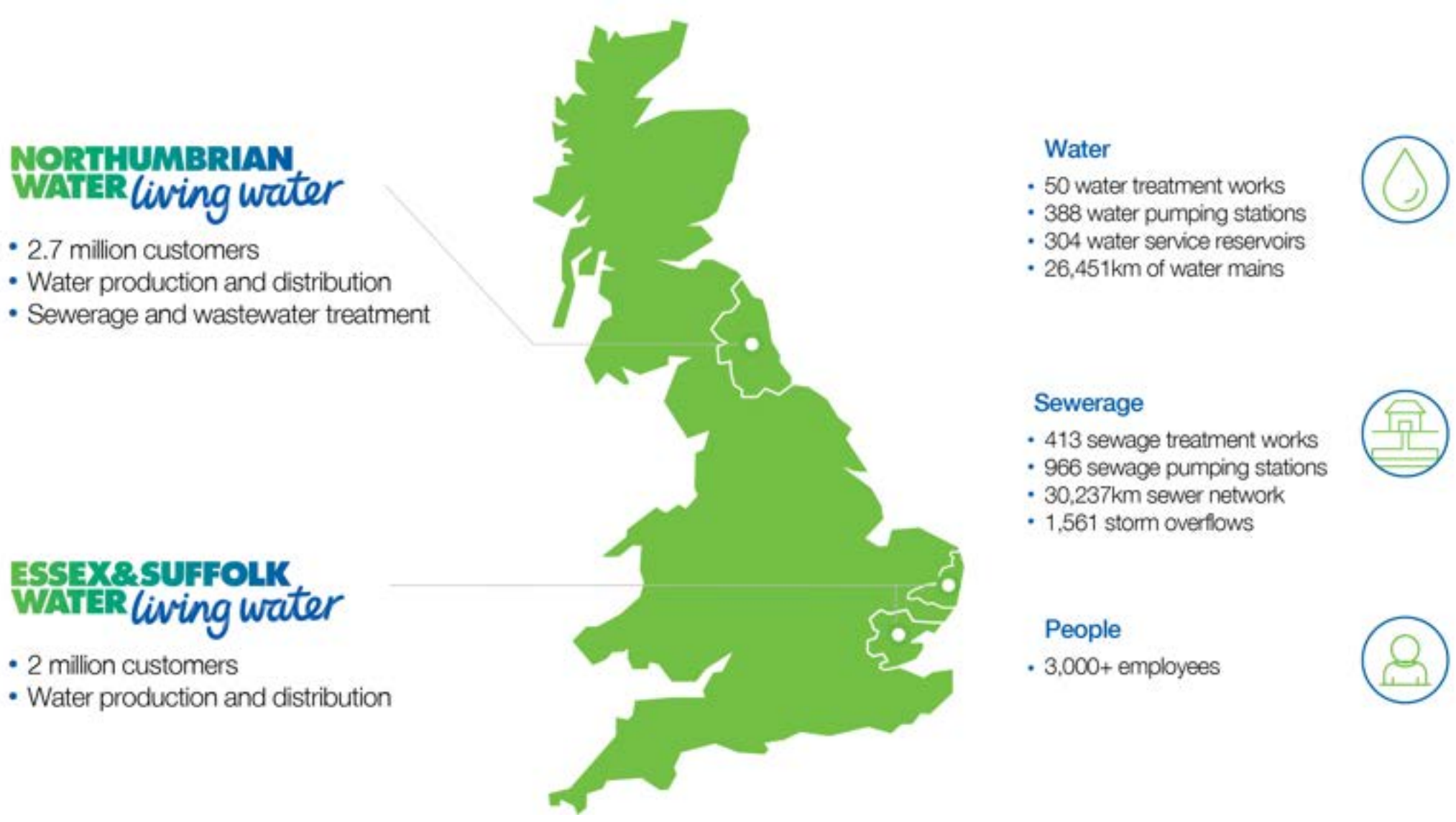
Introduction

About us

We are privileged to operate across distinct regions of the country. Essex & Suffolk Water (ESW) provides water services only while Northumbrian Water (NW) provides both water and wastewater services.

This means that for some aspects of the plan we take differing approaches. Much of this plan relates to both ESW and NW, but where this is not the case, we make this clear.

Figure 4: About us



Our Purpose, vision and values

Our Purpose is the reason we exist, and it guides our all our future plans.

We have always been an ethical business but we redefined Our Purpose in 2021 by engaging with employees, customers, stakeholders and our Board to develop a relevant, enduring and shared understanding of why our company exists. It is well understood throughout our business, with our dedicated colleagues committed to delivering for our customers, communities, and environment every day⁷. We report transparently on these outcomes in an annual [Our Purpose report](#), which measures and communicates how we truly live Our Purpose.

Our vision is to be the national leader in the provision of sustainable water and wastewater services. We define this as being in the top two companies for customer service (C-MeX) and ranking as the best company across a wide range of service metrics which are much broader than those which Ofwat considers in its annual service and delivery reporting⁸.

⁷ From our latest [Great Place to Work](#) survey 94% of our people say we are committed to delivering an unrivalled customer experience for our customers
⁸ In 2021/22 we ranked 4th in our National Leader assessment relative to the other nine Water and Sewerage Companies and in 2022/23 we ranked 2nd in our assessment. NWL analysis of 2022/23 APR company datashare.

Our Purpose defines who we are, our vision defines what we do, and our values define how we do it. How every one of our employees behaves underpins our reputation, and building trust among our customers and wider stakeholders is crucial to achieving Our Purpose. Our values set out the behaviours we expect our people to demonstrate, supporting them to take the right decisions and actions to deliver Our Purpose and vision.

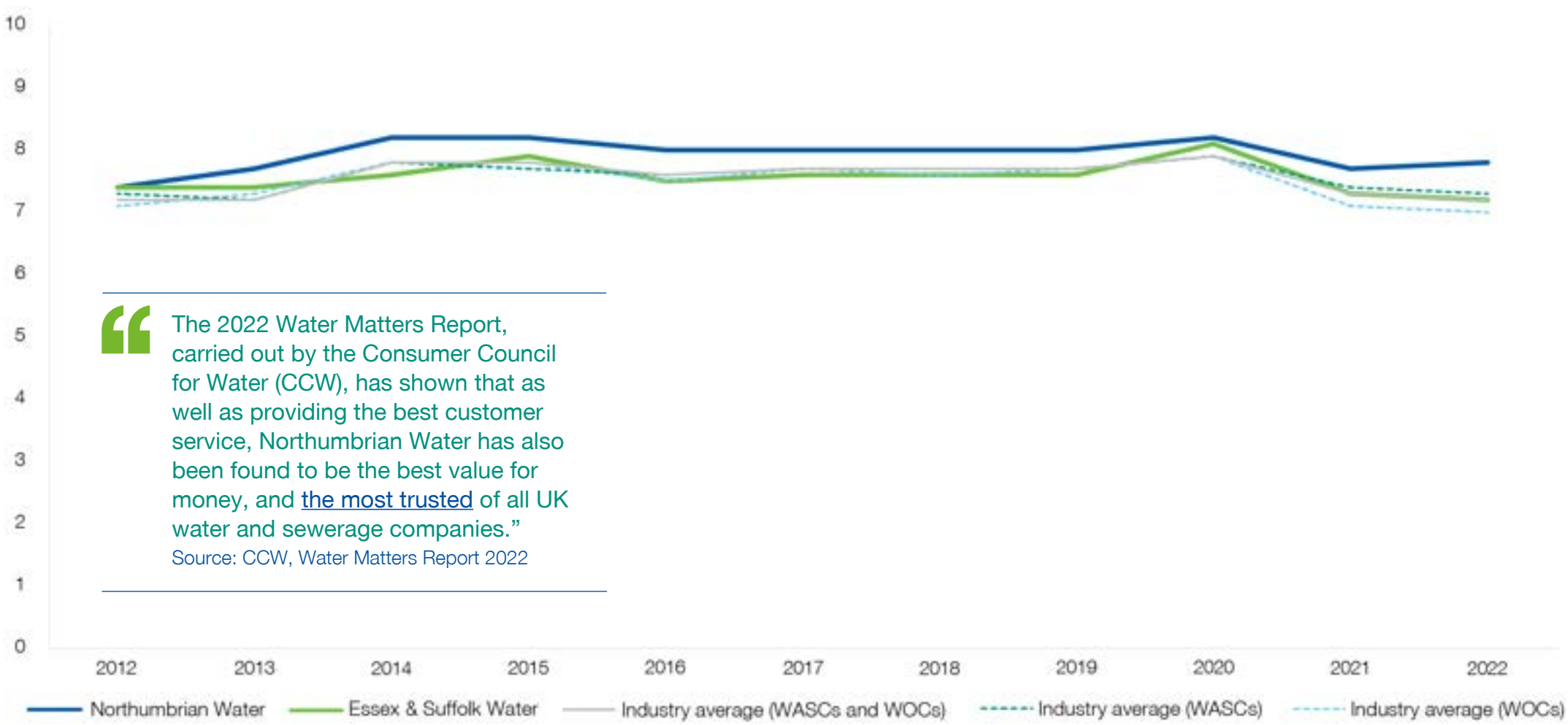
Our strong positive culture is evidenced with our appearance 12 times as the only water company named on the [Ethisphere Institute’s World’s Most Ethical Businesses list](#) and being the first water company to achieve the Good Business Charter. In CCW’s 2023 research into [Customer-Centric Company Culture](#), we are frequently cited as the example of ‘what good looks like’. Our commitment to innovation extends beyond our industry, showcasing our dedication to excellence.

All of this supports our reputation and the trust and confidence that customers and stakeholders place in us. In Consumer Council for Water’s (CCW) most recent [Water Matters Report](#), Northumbrian Water is the most trusted water and sewerage company in England – and we have remained amongst the most trusted companies in the sector for many years. Our trust score in Essex & Suffolk Water is above the industry average.

Figure 5: Our business model



Figure 6: Trust in NWL



Source: CCW Water Matters Trust scores (trust across our NWL operating areas and industry average trust score).

Our People Strategy

We are reviewing our People Strategy and will publish our updated strategy in early 2024. This is driven by our Purpose and how we make that real for all colleagues.

“ The right people, with the right skills, in the right culture, enabled to deliver customer-focused business objectives and thrive in an evolving world of work.”

This will help us make sure we have the human capital and culture to keep driving advances in long-term resilience, in the face of such a huge transformation programme. It will be a key enabler alongside our innovation and partnership approach.

- Our People Strategy will be focused on:
- Attracting and developing the right people and the right skills.
 - Creating the right culture for all.
 - An enabled, performing and thriving workforce.

How we perform

We are proud but not complacent of our performance.

Over the last ten years, we have become one of the most efficient water companies – we rank second among the Water and Sewerage Companies across Ofwat’s cost assessment models and we were the benchmark company for wastewater at PR19. From this efficient position most of our improvements to services in this Business Plan will be made without increasing bills to customers.

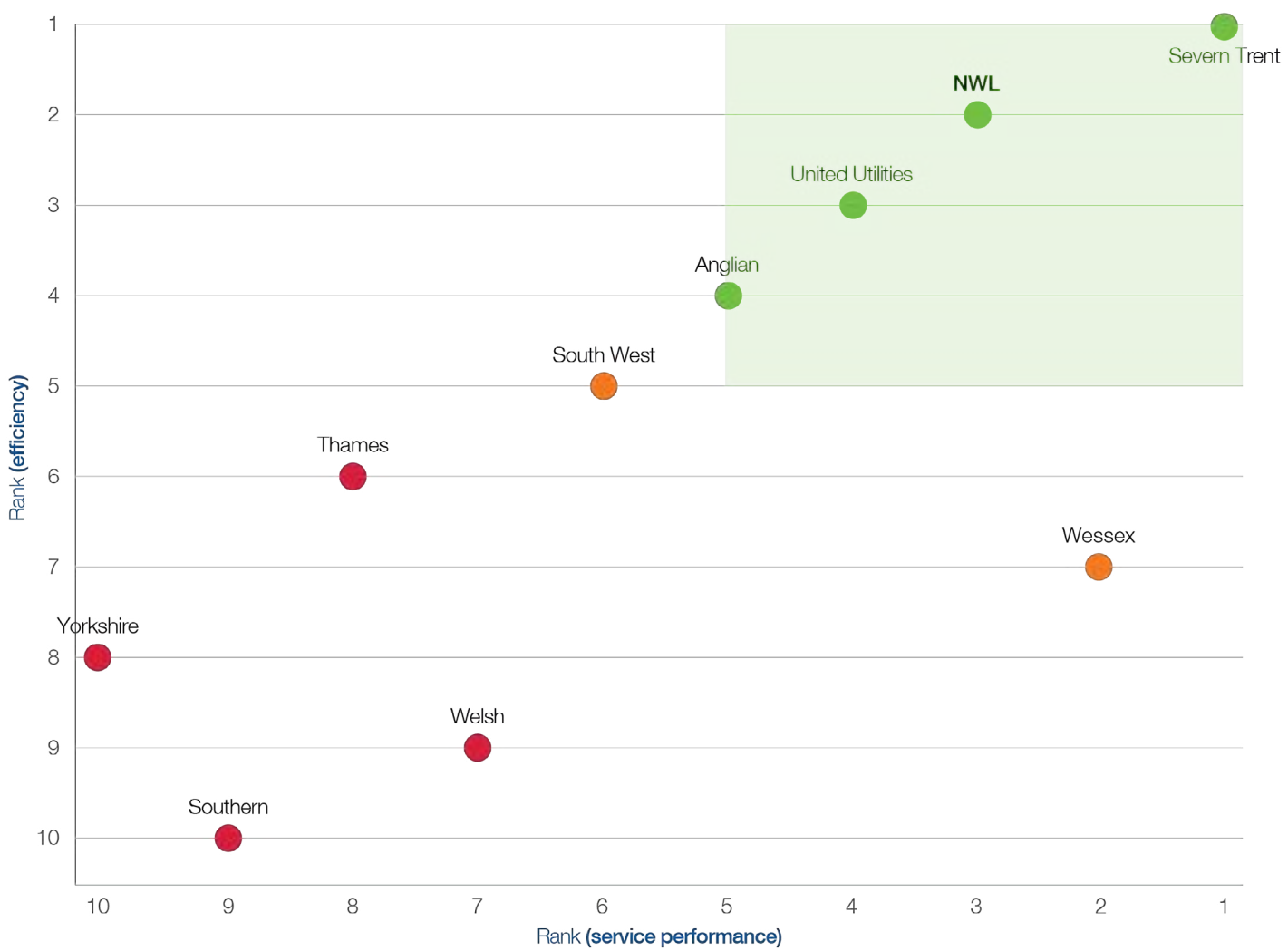
We’ve invested heavily in digital transformation and innovation, working in partnership with thought leaders. These partnerships and our focus on innovation as well as an ongoing focus on opportunities for cost efficiency have meant we expect to deliver c.£260m of efficiencies up to 2025 and are in a good place to meet the upcoming challenges. We have set ourselves another challenging target to improve our efficiency by a further 0.8% per year on top of these service improvements. Our PR24 plan will require us to find a further c.£400m of efficiencies up to 2030.

In figure 7 we compare our overall cost efficiency, using Ofwat’s cost assessment models and service performance rankings across the ‘common’ PR24 service metrics that Ofwat sets out to other companies.

While our comparative performance to others is strong we recognise that during the current 2020-25 period we have not always met all of the commitments we made to customers in our Business Plan and there remain important areas where we need to do better.

We were proud to be recognised as the best performer in the sector for customer service in 2022/23 and have met our commitments and remained among the best performers in the sector for pollutions and bathing water quality. We have also delivered a step change in our flooding performance and priority services reach (PSR) moving us into the top three performers in the sector this year for internal flooding and top four for PSR to meet those commitments. However, we were placed into a transformation programme by the Drinking Water Inspectorate (DWI) in 2020 and have been underspending against our enhancement programme which has been delayed by the Covid-19 pandemic.

Figure 7: Our cost efficiency and service performance places us in the top 25% of water and sewerage companies



Source: NWL analysis using industry APR service performance data and historical industry cost data. Efficiency ranks based on Ofwat’s PR24 cost models with weighted efficiency scores across all services/models with data up to 2022/23. Service performance ranks use 2021/23 data for Ofwat’s PR24 ‘common’ PCLs and give each PC an equal weighting, but data excludes biodiversity, BRMex and river water quality where comparative information is not yet available

We developed clear plans to strengthen our service performance in each of the relevant areas, published those [plans](#) on our website transparently and are investing more than ever to improve that performance. We are materially on track with those plans which also included proposals to accelerate our major investment programmes.

The key areas of service where we needed to improve are in relation to drinking water quality, managing water consumption, leakage, interruptions to supply and treatment works discharge compliance. Three of these areas are considered to be ‘high’ priority service areas for our customers⁹ and we are particularly keen to see performance improve.

We are already starting to see the improvements in our performance and in our most recent [Annual Performance Report](#) we met more of our commitments to customers than in 2021/22 including meeting our targets for leakage (ESW) and Priority Service Register and ranking among the best WaSCs for supply interruptions. In 2023/24 we are also seeing a marked improvement in our drinking water quality performance following the additional investment we are making. In July our CRI score was 1.4 having been as high as 5.7 at the same point in the previous year. Ofwat has placed us in the ‘average’ category in its most recent report.

9 NWL, 2023, PR24 Customer research – Prioritisation of Common PCs

Our success hinges on insourcing, ownership, and accountability, an important philosophy which drives our operating model. Partners are engaged for specialised expertise or increased activity but where possible we keep our operations and activities in-house.

In developing our PR24 Business Plan we have considered and reflected on the learnings from our PR19 experience. We have developed more robust delivery plans than ever working with independent experts to challenge us to ensure that we know how we will meet the commitments we make in this plan and considering how we can apply innovation to help us meet those plans more efficiently¹⁰.

Our environmental performance

Customers have told us that investment in storm overflows is important¹¹. In the North East, we have some of the lowest levels of pollution and some of the cleanest rivers and beaches in the country. 32 out of 34 of our coastal bathing waters are classified as Excellent or Good and two of our catchments, Northumbrian Rivers and the Solway, have the highest proportion of water bodies by surface area meeting good ecological status in England and Wales.

10 [A5: Deliverability and past performance](#) (NES07) and [A4: Outcomes](#) NES05
11 In deliberative discussions, customers have told us that investment in storm overflows was of paramount importance. 2023, NWL A&A Testing qualitative research, page 108

But this isn’t enough and our plan sets out our ambition to ensure we play our part helping 75% rivers achieving good ecological status by 2038, in line with the legislative requirement and our plans to invest.

Thanks to our investment and forward thinking approach, we managed the 2021 drought without introducing any restrictions despite serving some of the driest areas of the country in Essex and Suffolk. Our track record in maintaining resilient supplies is strong and we pride ourselves on our forward-looking strategy and long-term vision.

For example, we started the planning, environmental studies and consultation process for additional water in Essex in 1993. By expanding Abberton Reservoir in 2014, we invested c.£150m and increased its storage by 60%, or 15bn litres, helping to secure the water supply in the region. We have worked hard on protecting and enhancing the environment and in two of the last three years we achieved the highest four-star ‘leading company’ rating for our environmental performance from the Environment Agency and in the third year we achieved a three-star ‘good company’ rating, the second best result. Our performance has not declined but the standards to achieve have tightened.

We know that we need to go further and this plan represents a ten-fold increase in

our levels of investment to better enhance and protect the environment.

Our track record

Our ambition is driven by our vision to be the national leading water and wastewater company in the country and in line with this we have always set ourselves challenging targets to improve our service levels and cost efficiency.

Our plan sets out how we expect our performance to improve in these areas including through new investments and innovation. We have a strong track record in delivering step changes in performance which we set out in figure 8. This track record supports our position as one of the most trusted companies in the sector and we want to retain that trust and confidence in the face of external concerns with the wider sector’s performance.

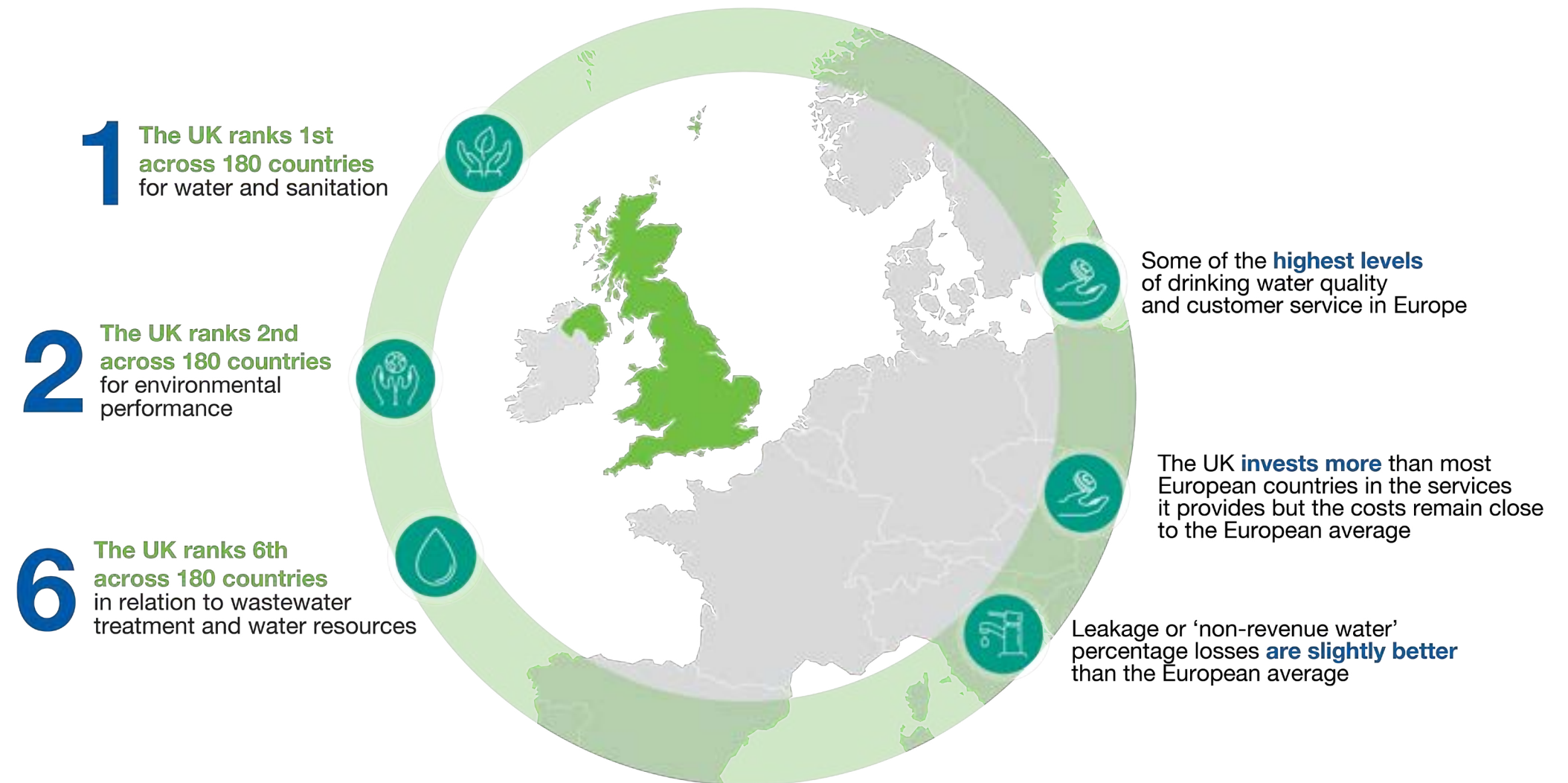
“Some companies are doing better and some metrics are improving. Credit to Severn Trent Water who retain a 4 star rating for the fourth year, and to United Utilities and Northumbrian Water who are not far behind.”
[EA, EPA](#)

Our shared vision for the future | 16

Figure 9: The UK water sector in context

The UK water sector in context

While international comparisons are always imperfect, the UK water sector already appears to perform well compared to other countries across a range of indicators albeit we know we need to improve in relation to our performance on the environment especially river and bathing water quality. Our plan seeks to take us to a leading position across the UK water sector.



Sources: A good summary of European comparative performance can be found [here](#) from 2021. Global Water Intelligence completed a comparative report for Severn Trent in 2018 which can be found [here](#). Yale University annually completes the Environmental Performance Index across 180 countries. For 2022 the UK ranks 1st= for water and sanitation, 2nd for overall Environmental Performance and 6th in relation to wastewater treatment and water resources. Details can be found [here](#). Details on the ecological status of UK surface waters can be found [here](#).

Addressing the environmental challenges

- Investing c.£1.7bn to improve the environment - ten times the current level.
 - Eradicating serious pollution events and delivering a c.30% reduction in all pollutions.
 - Continuing to offer some of the cleanest bathing waters in the country while further improving North East beaches.
 - Meeting strict environmental targets - achieving a top 4* EPA rating.
 - Reducing wastewater spills by about a fifth - focusing on the most vulnerable locations.
 - Using innovation and creating catchment based communities to deliver nature-based solutions to reduce nutrients and maximise wider benefits to the environment.
 - Working with communities to solve shared problems through partnership working such as through the Northumbria Integrated Drainage Partnership (NIDP) and North East Catchments Hub.
 - Improving habitats to support biodiversity
 - Continuing to focus on operational emissions to meet the level of reduction in our existing 2027 commitment and remain on track to achieve net zero by 2050.
-

Investing more for the environment

Public focus on the quality of rivers and bathing waters has never been higher. Support for the environment has grown steadily over time among our customers but there has been a cultural shift among many stakeholders, customers, government, and regulators, with a renewed interest in our local environment.

In some of our research with customers, this was the only performance commitment where the majority of respondents didn’t think the level of ambition was ‘just right; with 63% of NW household respondents and 54% of NW respondents overall believing it was ‘not ambitious enough’¹².

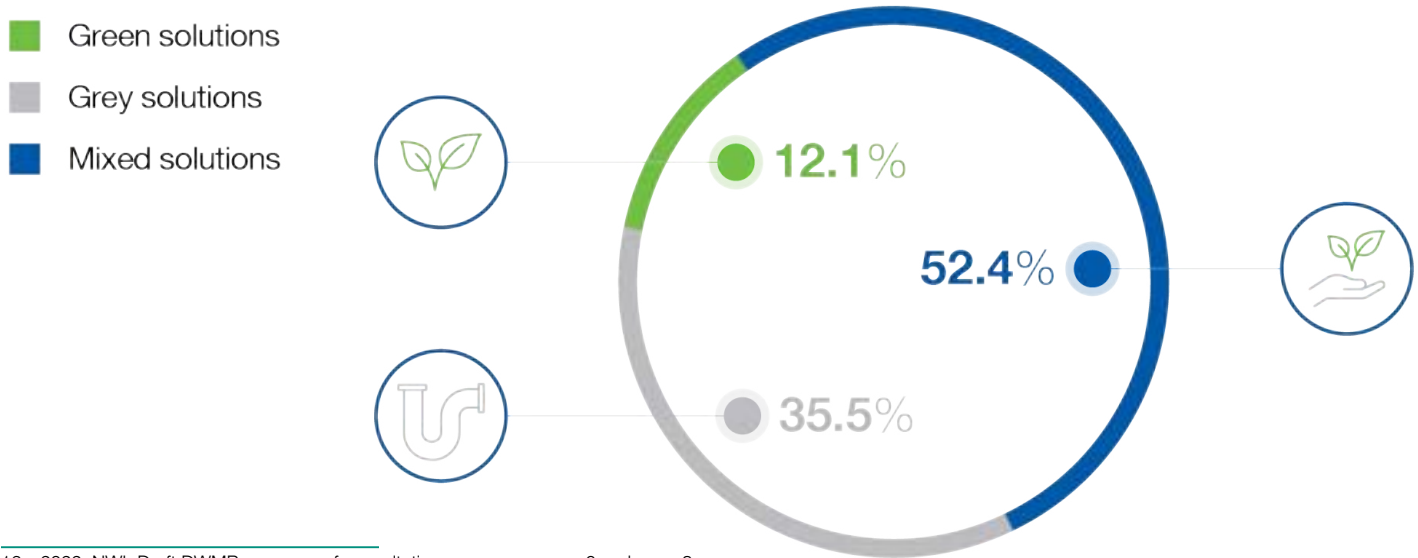
In the past, society, policy-makers and the water industry itself may not have been as ambitious as we could have been in prioritising environmental improvements and we are sorry for that. There is a recognition now that we must collectively put that right for the future. We welcome this renewed ambition. The water environment is not only critical to our business, but a major factor in making our communities great places in which to live and work.

In the North East we will invest c.£1.7bn in an ambitious environmental programme to meet the strict new environmental targets being set by Government and regulators.

12 2023, NWL A&A Testing qualitative research, page 96

This is a ten-fold increase in the size of our environmental investment compared to 2020-25. We want these new investments to dramatically improve the environment by reducing spills and nutrient pollution and increasing biodiversity and amenity benefits. To avoid adding to our carbon footprint, our plan focuses on catchment and nature-based solutions working in partnership wherever we can. Customers support approaches¹³ that have wider benefits for the environment and allow us to invest in more cost-effective schemes, such as those included for phosphorus management in our plan.

Figure 10: Mix of green, grey and mixed solutions from the DWMP (split by costs)



13 2022, NWL Draft DWMP summary of consultation responses, page 6 and page 8

We want to see major improvements in our local environments, including reducing the amount of water we take from the environment and eliminating our pollution impact on rivers and coasts. We will reduce the number of spills to the environment through storm overflows (SOs) by 20%, through a very large investment programme of over c.£1bn which focuses on the most significant locations. The government target for bathing waters is 100% improved by 2035 which equates to 54 bathing waters SOs improved (27 by 2030 and all 54 by 2035).

Our projections may change by 2030, when further investigations into whether an overflow causes harm to a water body are completed.

We already have some of the lowest numbers of pollution incidents in the sector, but we will eradicate serious pollution incidents entirely by 2030 and deliver a 30% reduction in all pollutions from an already high performing position across the sector. 32 out of 34 of our bathing waters are already at good or excellent status and we aim to continue offering some of the cleanest beaches and bathing waters in the country. Important work is taking place at the two bathing waters that are not rated Good or Excellent, and we are playing a full part in this even though their lower performance does not appear to be due to our work or assets.

Reviving Teesmouth: innovative restoration techniques and partnerships pave the way for environmental transformation

Nutrient pollution upsets the natural balance of aquatic ecosystems. Reducing nutrient runoff from agriculture, industry, cities, and wastewater is key to protecting water quality and marine life. Emerging new legislation seeks to deliver nutrient neutrality in certain key locations across the country and places obligations on water companies to reduce nutrient pollution from our treatment works.

Traditional methods used to remove nutrients like nitrogen from wastewater at treatment plants would have cost our customers around £320m to build and around £10m extra to maintain but we developed an alternative plan which uses innovative and nature-based solutions in the Tees catchment that will cost just £46m to build and £5m to maintain and resulting in greater improvements to the environment than traditional solutions alongside huge reductions in embedded carbon. Indeed, when wider public value benefits are considered the traditional approach would not have provided a positive cost benefit assessment.

In a water industry first for marine restoration, our plans for a Tees catchment based community include seaweed farming, shellfish farming, native oyster restoration, saltmarsh restoration, seagrass restoration and integrated constructed wetlands. Seaweed and shellfish farming will start a new industry on Teesside, not only improving the environment but starting a new economy.

We continue to discuss these plans with the Government and our environmental regulators and follow the progress of the legislation that will give legal effect to these requirements which is still passing through Parliament. We hope that we can agree a way forward that will allow the development of our nature-based proposals delivering greater environmental improvements including four times greater nitrogen removal than the traditional option, habitat creation, carbon sequestration potential and new jobs on Teesside, but still saving customers a significant amount of money on bills. We recognise that our plans are more risky and uncertain than traditional approaches but if we are to move away from traditional methods then we must begin to implement more of these solutions at scale and our proposals would allow this.



Tees estuary, Redcar

Reducing spills

We are investing more than c.£80m towards reducing our reliance on and use of storm overflows between 2020 and 2025. We have provided approx. 32,000m³ of additional storage since 2010. This is not just to build storage but also the connecting infrastructure. This equates to 37 Olympic swimming pools of storage.

The Government has published its [Storm Overflows Discharge Reduction Plan](#) (SODRP) in August 2022, meaning we now need to invest more to meet these new obligations.

Supporting biodiversity and wider public value

The World Economic Forum identified climate action failure, extreme weather, and biodiversity loss as the top three most severe global risks over the next ten years.

Biodiversity Net Gain (BNG) is a new requirement from the Government to help tackle losses in biodiversity. It means that any development requiring planning permission must leave the natural environment in a measurably better state than it was before. As business leaders we play a pivotal role and support this approach to combat biodiversity decline by making nature conservation intrinsic

to new development instead of optional. By 2050 all our construction activities, including those that do not require planning permission, result in a net gain in biodiversity of 10% (or the local requirement where higher).

We commit to enhancing or restoring 500ha of priority habitat every five years through partnership working and we will significantly reduce the risk of land and water based invasive non-native species (INNS) through proactive management and education activities.

We are also on track to create zero avoidable waste by 2025. This means eliminating, re-using, or recycling 90% of our waste from operations, and working with partners to contribute to the circular economy in our regions.

Delivering net zero

In 2018, we set our ambitious goal to reach net zero for operational emissions ([scope 1 and 2](#)) by 2027. We have reduced our operational greenhouse gas emissions by more than 90% from 303,000 tonnes in 2008 to just 23,000 tonnes in 2023. On a market-based measure of operational emissions we currently rank second for water and fifth in wastewater across the water and wastewater companies for the lowest operational emissions.

Since setting our target, we have reduced our emissions by approximately the same amount we originally identified in the ambitious goal we set ourselves as measured in tonnes of CO2 equivalent per year including through the use of high quality offsets.

However, the science and approach used to calculate emissions continues to improve and evolve. Consequently our measured emissions - in particular process emissions - are higher than originally estimated. We therefore no longer consider that our ambition to reach net zero operational emissions by 2027 is deliverable but will still seek to reduce our operating emissions by the same amount or more than we had estimated when we set the target.

We still consider that focusing on reducing operational emissions is the right thing to do in the near term, but we should move to a new approach. We are therefore committing to reduce our emissions in line with the Science Based Target initiative (SBTi) to make sure we are reporting and reducing our emissions in an internationally recognised way.

But reducing operational emissions is only part of the challenge. We are also reducing our ‘embedded’ carbon emissions – that is, the emissions from the materials and construction activities of our projects and new investments. We have set

ourselves a long-term target of reaching net zero for all emissions (scope 1, 2 and 3) by 2050, and this target is supported by our customers¹⁴.

Across our 2025-30 Business Plan, whole life carbon emissions of each option have been used to help decide on the right choices – with catchment management and nature-based solutions leading to much lower embedded carbon emissions for new investments. This builds on our existing efforts to reduce embedded emissions including through our [Responsible Procurement Strategy](#).

We will also continue to make reductions in our use of natural gas, road fuel, and emissions from wastewater processes. We are decarbonising our fleet by replacing those vehicles where electric alternatives are available and whole-life costs are equivalent to diesel vehicles. In line with customer feedback¹⁵, we no longer propose enhancement costs to accelerate the

“

Realistically, as a business owner or even speaking as a homeowner, I wouldn’t want my bill going up that much. But from an eco-point of view or from an environmental point view, it’s really important that we look after the planet, isn’t it?”

Online workshop, NW, non-household

14 2023, Pre-Acceptability research Part B
15 Source: NWG Pre-Acceptability research Part B, March 2023.

transition to low carbon vehicles. We will continue to invest in additional solar generation and are exploring other opportunities such as using heat sources from our operational assets to contribute to district heating schemes and algal wastewater treatment processes.

We will focus on collaborating with partners in our city regions in the North East, to make sure that nature-based solutions can be a part of decarbonisation and water resilience efforts. This can support improvements across the whole system, including outcomes such as reducing the amount of storm water flowing into our sewers (and so reducing the need for storm overflows).

Restoring and regenerating our environment

These improvements to the environment form part of our [Environment Strategy](#) (NES75). This strategy looks at how we can deliver our Purpose, working with others and demonstrating leadership to improve our natural environment. Our Environmental Ambition is: Together, we are restoring and regenerating our natural environment, creating a better place through our actions. Our five Environmental Priorities are water management for the environment and people, healthy catchments, rivers and coastal waters, effective climate action, valuing resources and eliminating waste, and thriving nature and communities.

Algae: The green machine for sustainable wastewater treatment

The Algae project at our Bran Sands Advanced Anaerobic Digestion (AAD) facility represents an innovation approach that aims to revolutionise wastewater treatment by using microalgae.

Bran Sands is a large sludge treatment centre, industrial effluent treatment site and gas to grid facility. Currently, the treatment process generates a challenging effluent that is costly to treat and contributes around 30% of the 15,000 tonnes of CO2 emitted by the Bran Sands gas to grid plant every year.

Off the shelf treatment options all involve breaking down ammonium to nitrogen oxides (NOx) which are released as greenhouse gases. This places a huge challenge on our net zero ambitions but also presented an unexpected opportunity when we discovered a unique microalgae growing in an out of service treatment cell. Through the implementation of an 8% scale microalgae plant, we can harness the remedial properties of microalgae meaning we will be able to reduce treatment costs by £170,000 a year, enhance biogas production, and significantly reduce our carbon footprint. We have already tested the treatment concept at smaller volumes and trialled different approaches and are now seeking to scale up the arrangements.

The project will provide full treatment of our digested sludge liquor which is around 5,500 tonnes a year.



Improving resilience and service to customers

- **Strong resilience record** - avoided water usage bans in 2022 drought, operated through extreme weather events with positive recognition from regulators.
- **Seeking to provide top-quartile performance** across the most important service areas for our customers in line with our vision with most improvements made without bill increases so customers pay only what is necessary.
- **Continuing to offer unrivalled customer experience** - number one in the sector and maintain our position as the most trusted water company in England.
- **Reduce leakage by c.8%** in Essex and Suffolk where we are already among the best in the sector.
- **Deliver a c.19% reduction in supply interruptions** returning to our leading position.
- **Deliver a c.25% reduction in external flooding and maintain an upper quartile position on internal flooding** continuing the improvements we are already making.
- **Improve our performance in relation to drinking water quality** through our ongoing transformation plan.
- **Ensure water supplies are resilient** to 1 in 500 year drought by investing c.£370m particularly in Essex and Suffolk.
- **Help our customers use water wisely and reduce consumption.**
- **Invest c.£400m to adapt to climate change** and ensure a healthy asset base reducing the risk of service disruption for customers from extreme weather.
- **2030 targets align to Long-term strategy (NES LTDS).**



We have a strong track record as a resilient company.

We have been able to maintain secure water supplies and did not need to introduce a temporary use ban (TUB) in the 2022 drought. We have been able to operate through an increasing number of extreme weather events in the 2020-22 period. But the uncertainties that exist in today’s world will continue to challenge us in the future.

Improving resilience in our water supplies

In Essex and Suffolk, with the most urgent water supply challenges, we need to invest c.£370m in new water supplies and in activities to help reduce demand for water. This includes c.£25m more on leakage in 2025-30 than we are forecasted to spend in 2020-25 (totex), c.£125m in smart meters, including for businesses, and c.£12m more than in 2020-25 in other ways to help customers use less water in other ways. We recognise that per capita consumption across our areas has been stubbornly high and have put forward a comprehensive plan that will set us on a trajectory to the long-term target of 110l/p/d by 2050. Our plans will ensure water supplies are resilient to a 1 in 500 year drought and leave more water for the environment.

“Northumbrian Water... staffed key water treatment works 24 hours a day during the incident period to reduce the likelihood of loss of production.”

Ofwat, Review of company responses to ‘Beast from the East, 2018

“Jacobs considers that the actions NWL took during and in the aftermath of Storm Arwen were responsive and robust. It quickly mobilised its Incident Management Team (IMT) and effectively organised what resources were available to manage the incident to the best of its ability.”

Jacobs, Review of Northumbrian Water’s response to Storm Arwen, 2022

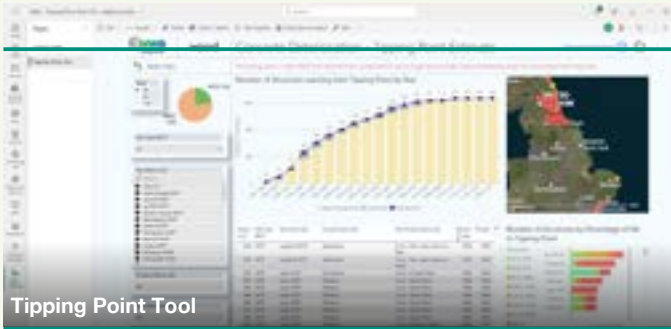
Asset health – a key risk to our operational resilience

We deliver water and wastewater services through a complex system of around £28bn worth of assets. We see growing risk to the operational resilience of our business as those assets age and their condition deteriorates. We track operational resilience risks through our corporate risk management framework and asset intelligence. We submitted a [paper](#) to Ofwat’s ‘Future ideas lab’ which discusses some of these issues in more detail.

Customers pay for the maintenance we make to our assets through their bills, so it is essential we manage our assets effectively and invest efficiently. In 2021 Ofwat introduced the [Asset Management Maturity Assessment \(AMMA\) framework](#) (NES67) to assess asset management capability across the sector and we are pleased that a recent independent assessment suggests we are managing our assets effectively. In 2023 the majority of our asset management maturity grades are competent (level 4) or optimising (level 5).

We also seek to use innovation to drive efficiency and improvement. For example, at our Innovation Festival 2021, we developed our ‘tipping point tool’. The tool takes best practice from oil and gas industries and allows us to predict when concrete civil assets, which make up about 15% of our asset base, will need to be replaced; building resilience and meaning we can focus our investment programme where it’s needed most.

Before developing the tool, we needed specialists to visit and make on-site inspections to extrapolate what was found across our whole asset base. With the Tipping Point Tool, those predictions are far more accurate and reduce the risk of large-scale asset replacements being required over a short period of time - something that would be expensive for customers. Initial estimates show a repair would cost 10% of the cost of replacement so the tool has the potential to reduce costs, allowing us to plan and focus investment more effectively.



Improving resilience to climate change and ensuring healthy assets

We also need to act now to address the risks of deteriorating asset health – and protect services from power failures and flooding by adapting for climate change. We will invest c.£400m to build resilience and make sure that critical assets are fit for purpose as they need to operate every hour of every day, all year round. This will make sure that customers experience less service disruption including from extreme weather events, like Storm Arwen, which we expect to see more of in the future.

Customers supported these investments when they were given the choice of carrying them out or not in our qualitative A&A Testing recognising that we need to adapt to the effects of climate change if the essential services we deliver for them are to be resilient in the long-term¹⁶. Customers also supported asset health and climate change adaptation investments in our pre-acceptability testing and other previous research we have carried out¹⁷.

If customers are going to support bill rises to fund more investment in the maintenance and replacement of our assets then they need to be confident that we are managing our assets as effectively and efficiently as possible. We were one of the first companies in

¹⁶ 2023, NWL A&A Testing qualitative research
¹⁷ 2023, NWL PR24 Line of Sight (Appendix A7.1), section 7

the sector to earn the ISO 55001 accreditation for effective asset management and a recent independent assessment places us in the top quartile of companies for our asset management performance under Ofwat’s Asset Management Maturity Assessment (AMMA)¹⁸.

Thinking ahead is part of our DNA. We make decisions today with an eye toward the future and always have done. For example, we were the first water company to build a water reuse scheme and our major enlargement of Abberton completed in 2014 (for which planning began twenty years earlier) bolstered water availability for the communities we serve and remains one of the only major water supply investments to be approved since privatisation. Our sludge strategy and AAD processes have led to industry leading efficiency.

“If they keep delaying it, the climate is going to keep getting worse, more storms, more floods, it will just get harder and harder to fix”
Online workshop (Young People Panel, Northumbrian Water) March 2023, NWG Pre-acceptability Part B

“I think it’s so important. The weather is all getting extreme now. It’s a manageable amount [of money] and I think that’s very important as well.”
Online workshop (Essex People Panel) March 2023, NWG Pre-acceptability Part B

¹⁸ ARUP, 2023, Northumbrian Water Asset Management Maturity Assessment

Striving to be the national leader in the services we deliver to our customers

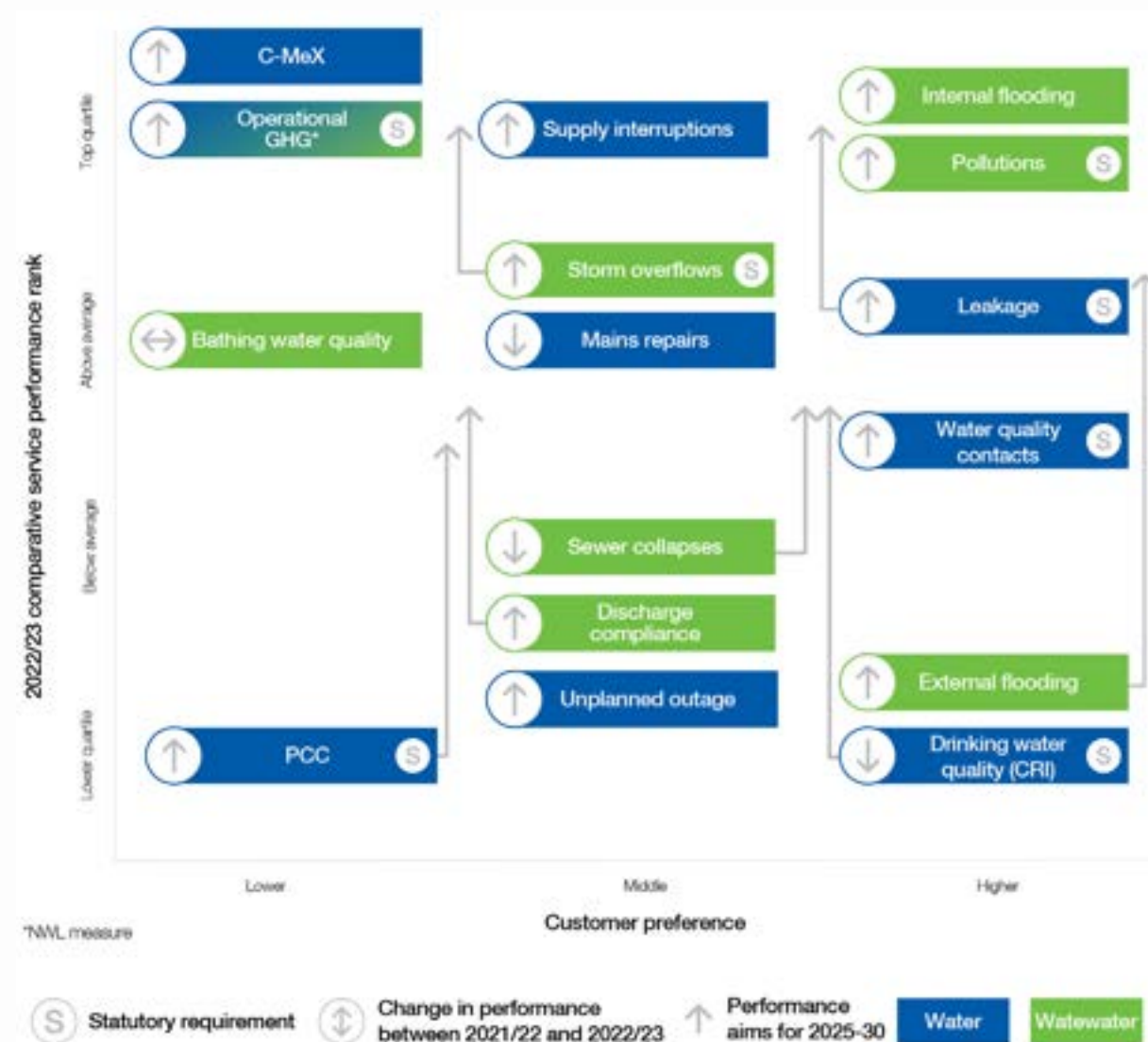
Our plan offers top-quartile performance across the most important service areas for our customers¹⁹, this includes among others:

- Continuing to provide top quartile performance for pollutions, customer service, operational GHG reductions and internal flooding, following the major improvements we have made in that area during the last few years.
- Improving to achieve top quartile performance in external flooding and supply interruptions where we are seeking to return our performance to where it has been in past.
- Setting targets for zero drinking water quality failures with robust plans to place us 'in the pack' by 2030.
- Meeting long-term legal targets for leakage and PCC and maintain a stable and not deteriorating asset base.

Most of these service improvements will be delivered without any increase in bills for customers. In some instances, we will improve our performance from other investments we need to make for other reasons, but occasionally we will need to invest more. These extra investments will support improvements in leakage, demand management and pollutions.

¹⁹ 2023, NWL PR24 Customer Research – Prioritisation of Common PCs and 2023, NWL PR24 Customer Research – Common PCs Insight Summaries

Figure 11: Understanding our service performance relative to other companies and driving improvements in line with customer priorities'



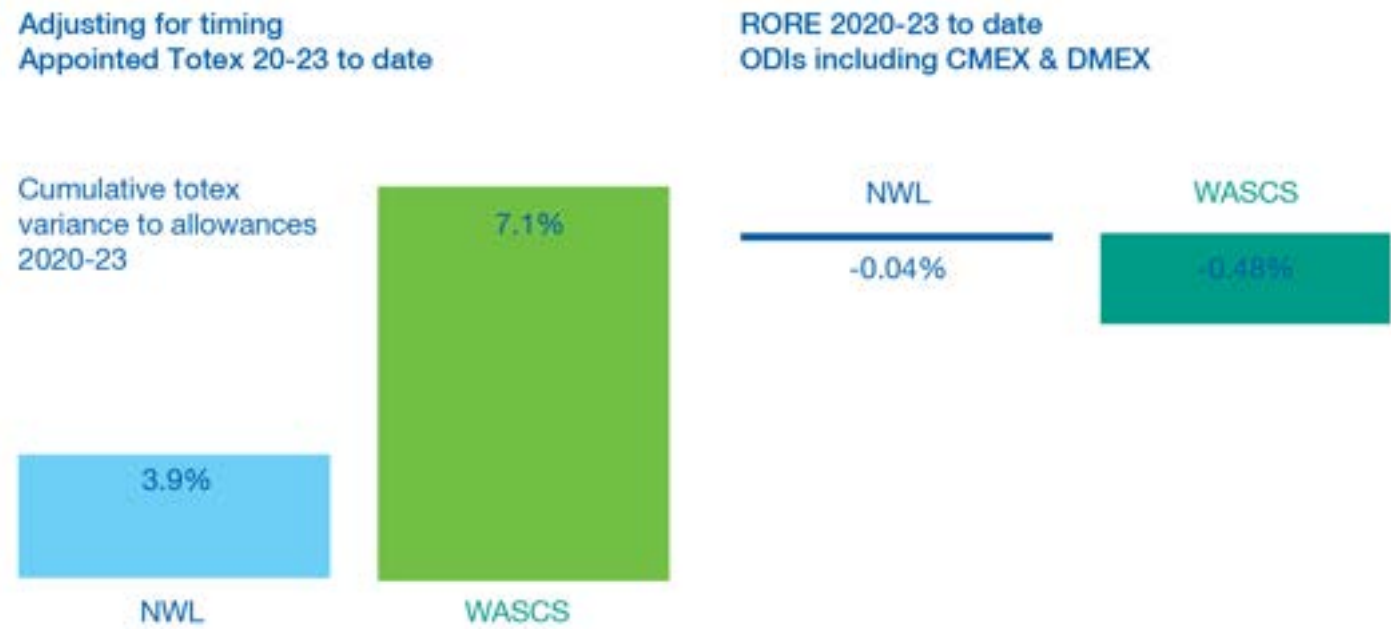
We continuously assess our relative position in comparison to the other ten water and sewerage companies in England and Wales and communicate that to our colleagues across our business. We monitor our performance diligently and are constantly seeking opportunities to learn from our past performance and best practice inside and outside the industry to improve.

Our plan aligns with our national leadership vision. We've chosen this benchmark because it's ambitious and relevant. Currently, no company in the sector meets Ofwat's cost efficiency and service performance targets comprehensively, undermining the credibility of these goals.

This is evident in figure 12 overleaf, which highlights that the sector, on average, is significantly overspending against the allowed costs Ofwat set in the last price review and failing to meet service level targets. This trend persists even though UK Water performs well compared to other countries (see figure 9).

We have benchmarked the costs to make sure they are efficient and that customers don't pay any more than is absolutely necessary and appropriate. All these targets are aligned to the long-term ambitious goals that we have set out in our [Long-term strategy](#) (NES_LTDS).

Figure 12: Current water and sewerage company cumulative performance against allowed costs ‘Totex’ and service performance (based on Return on Regulated Equity performance on service incentives including CMex and DMex).



Source: Data from APR20-23, Table 1F. Note: Actual returns and notional regulatory equity

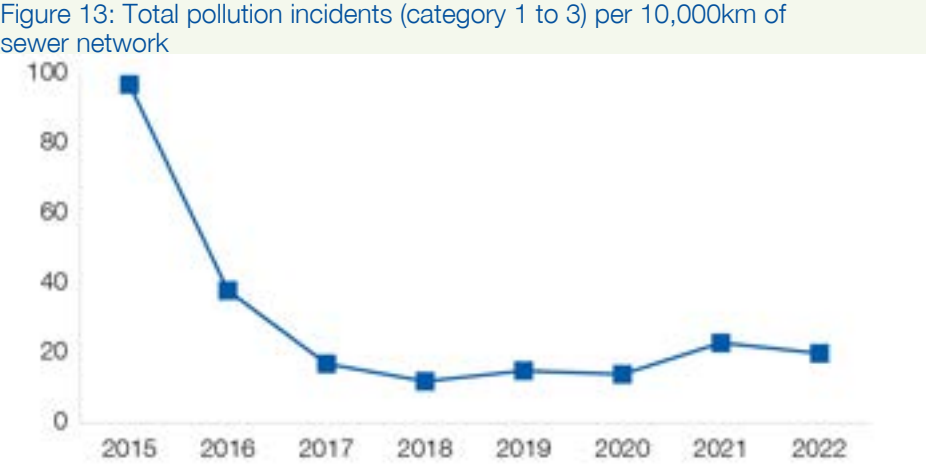
Leading approach to pollution

We’re maintaining industry leading levels of wastewater pollutions through our transformative pollution management programme and [Pollution Incident Reduction Plan](#) (PIRP), which outlines what we’ll do to reduce the risk of these incidents and what we’ll do if an incident occurs. By developing a culture focused on all aspects of pollution risk, our approach has resulted in a real transformation in our pollution performance. Since 2017, we’ve been at the frontier with industry-leading performance on pollution.

Through effective, targeted, and open conversations with our customers, we are involving them in reducing pollution by keeping our wastewater network free-flowing and working at capacity. In 2020, we launched the Bin the Wipe campaign.

The campaign uses innovative tools to track wrongly flushed items back to the homes they came from and helps customers to understand that flushing wipes can cause sewer flooding in homes and damage to the environment, such as rivers and beaches.

Our Bin the Wipe team focuses on hot spot areas, clearing blockages and identifying where wipes have been flushed. The campaign, which has been adopted nationally by Water UK, has reduced the number wipes found in the sewer network by more than 60%, without the need for us to charge or prosecute any customers.



Delivering fair investment

- **Investing over £6bn** - more than double the current programme.
- **Creating more than 3,000 extra jobs in our regions.**
- **For every £1 customers pay in their bills, we will spend £1.66 in the North East and £1.29 in Essex & Suffolk.**
- **c.£400m of this investment will come from shareholders** through new equity injections.
- **Enabling long-term progress** - investments aligned to 2050 targets for service and environmental performance as set out in our [Long-term strategy](#) (NES_LTDS).
- **Under our proposals over c.£90m will be returned to customers** if interest rates fall as is forecast.
- **Accelerating c.£100m of investment into 2022-25 to deliver benefits to customers and the environment sooner** - four times what Ofwat and Defra have allowed so far.
- **Transforming our business** to enable us to deliver such a large programme and remain the top company to work with according to the supply chain.
- **Attracting essential investment needs a fair return** to deliver the plan and secure financing but equity returns in the sector have halved since 2016 and are below expectations and other sectors.



We are more than doubling the supply chain capacity we have and adding over 30 new supply chain partners to provide capacity to deliver over c.£700m of work a year compared to around c.£300m currently.

Throughout 2025-30 we will invest 60p in every £1 in our operating areas to support local jobs and communities.

Transforming to deliver future investment requirements

To deliver the c.£3.6bn²⁰ capital investment plan required to drive real improvements for customers and the environment – more than double the size of the current investment plan – we need to transform how we operate.

²⁰ Supporting the Government's desire to see growth in our regions and 'levelling up'.

We set up a change programme in January 2023 to begin that transformation. We are accelerating c.£100m of investment into 2023-25 to deliver benefits sooner and to get a head start on the programme ensuring a flatter and more deliverable profile of work in the 2025-30 period. This is four times what Ofwat and Defra have assumed in their [accelerated investment funding](#). This early expenditure covers some £2.2bn of the total investment we have in the Business Plan.

Accelerating the investment also allows us to give earlier visibility of our pipeline of work to our supply chain partners and we have introduced new arrangements to work with them through our new 'Living Water Enterprise' model.

Through these new arrangements we are increasing the capacity and capability of those partners to be able to deliver such a large investment plan. We want to remain the top company in England and Wales to work with, and independent assurance confirms that we remain on track according to the [supply chain partners](#).

We are also expanding our own capacity and capability by scaling up our recruitment. The transformation programme is overseen by the executive team lead by the CEO with monthly updates to the NWL Board. We know we have lots more to do and the delivery of such a large

programme of work will remain a significant challenge but we are doing all we can and remain on track with our transformation plans.

“ We believe that the 2025-30 Delivery Strategy is appropriate and proportionate to the challenges and delivery risks associated with the PR24 Plan. ”
Jacobs, Deliverability of PR24 Schemes – Final Report, 2022

“ Progress of the Transformation Plan generally is good ”
Jacobs, Deliverability of PR24 Schemes – Final Report, 2022

The investments we are proposing will support the delivery of the 2050 targets that we have set out in our long-term strategy. That strategy suggests that the step up in investment will need to continue into the future with similar levels required in latter periods.

In figure 16 we provide a profile of the investments required in the five year 2025-30 period and from 2030-50 on average in future five year periods. In figures 14 and 15 we provide an overview of the key milestones associated with the major investments in our programme under our accelerated investment profile.

Figure 14: High level programme overview: water

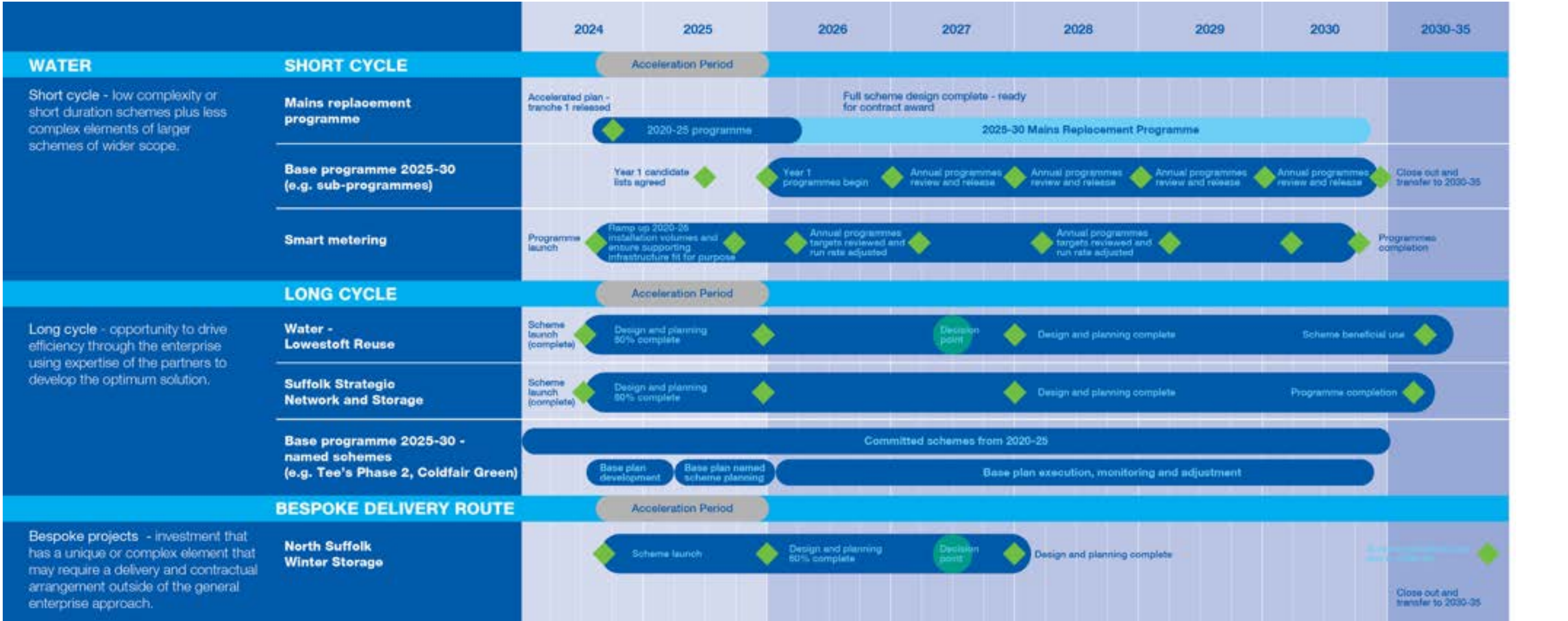


Figure 15: High level programme overview: wastewater

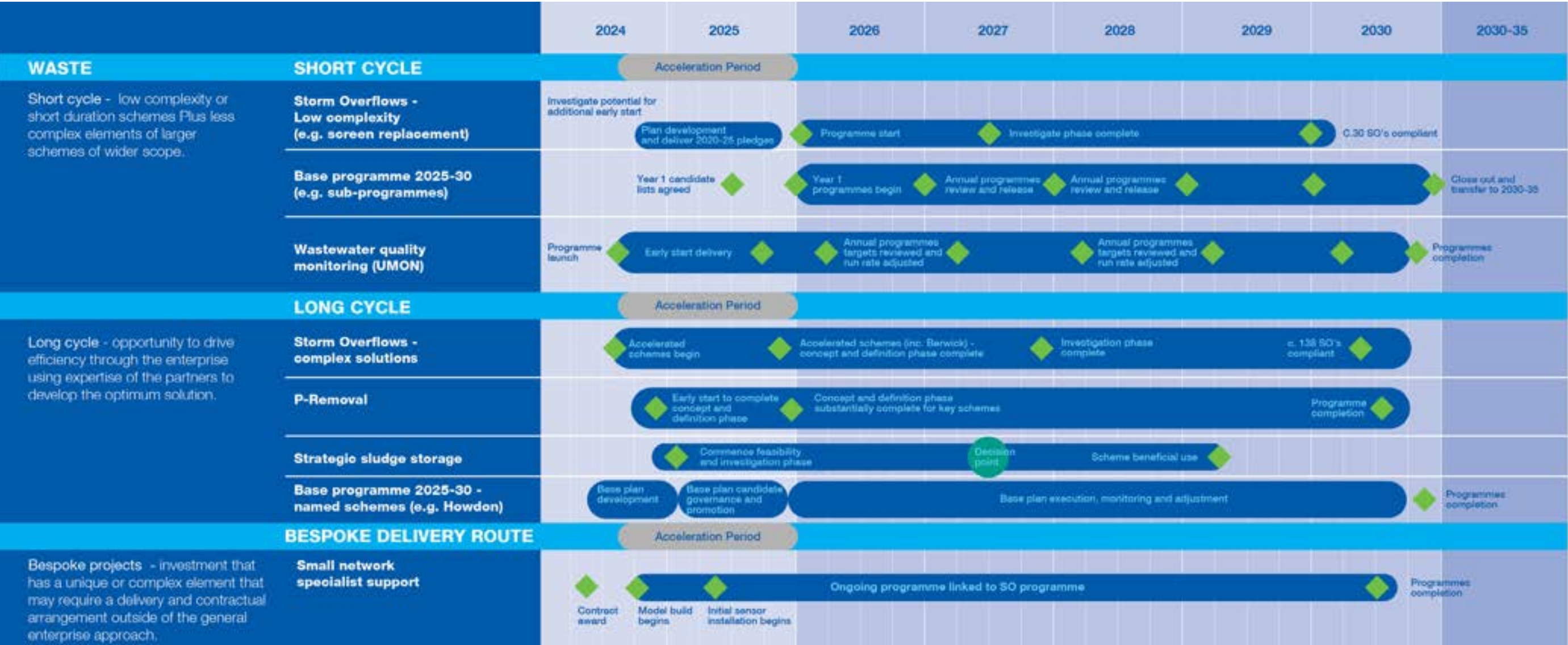
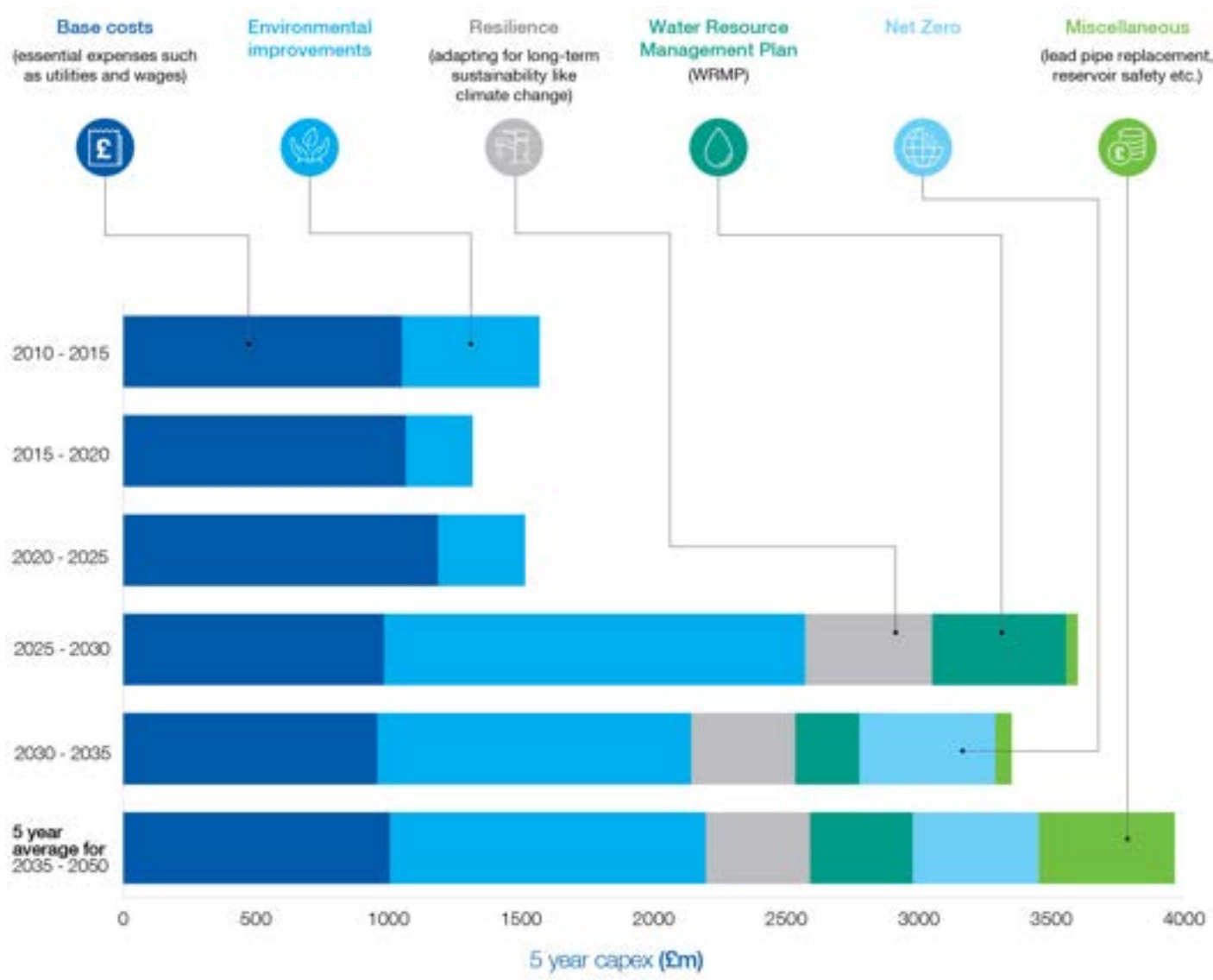


Figure 16: We are investing more than ever to meet our long-term objectives



Driving efficiency and innovation for customers

We aim to maintain strong efficiency levels and have set upper quartile efficiency targets in our plan. We have also established a 0.8% per year ongoing efficiency challenge to ensure cost-effectiveness through innovation and technological improvements.

We will build on this strong starting position by delivering further efficiencies in our plan including:

- c.£191m of catch-up efficiencies to bring us in-line with the upper quartile efficiency level we currently observe in each key base activity area.
- c.£221m of future productivity improvement in delivering our large enhancement programme.

This is on top of the c.£260m of efficiencies we expect to deliver from our current 2020-25 Business Plan against a backdrop of high energy, chemical and construction cost inflation.

Figure 17: Evolution of costs from 2020-25 and 2025-30 (£ms)



Source: NWL analysis of the Business Plan.
Note: 'New investment pressures' represent the additional costs that we consider are needed to meet committed PCLs. 'Catch-up efficiency' represents efficiencies we will need to deliver to achieve the 'upper quartile' position across Ofwat's cost models (this is mostly in the water service). 'New growth investment' is investment to address growth/new development in our area and other cost drivers. 'Ongoing efficiency' represents a 1% per annum productivity improvement rate assumption.

Innovation has been key in delivering our strong positioning on cost efficiency and will be crucial in delivering the future efficiencies required in the plan. We have been one of the leading performers in Ofwat's Water Innovation competitions with 12 winning bids to date that have totalled £18.9m in funds allocated. This corresponds to 23% of winning bids in a space where 16 companies are active. The other UK water companies will be able to take full advantage from the knowledge generated from the 12 funded projects that we are leading. Some of these projects have sector wide benefits and have big potential to speed up innovation in the sector such as the National Leakage Test and Research Centre which will be up and running in 2024 and STREAM the open data platform.

The key areas we expect our innovation efforts to focus on include:

- Improve energy use and explore alternative sources – this will support our net zero ambitions and help to capitalise on opportunities to move away from fossil fuels. Hydrogen is a byproduct from our waste processes and is a rapidly developing space that we are exploring with others.
- Circular economy – in addition to hydrogen, our waste operations produce other valuable biproducts that can be reused such as phosphorous and ammonia. There is

large opportunity to get value from these biproducts for the benefit of customers and to make the economy more sustainable.

- Reduction in the use of chemicals – our treatment processes currently rely on key chemicals such as chlorine and ferric sulphate which are becoming increasingly expensive and supply chains are subject to disruptions. Optimising our processes and finding alternative more sustainable processes will improve efficiency and benefit the environment.
- Robotics and automation - the advance in robotics and automation is accelerating and technologies which were once out of reach of the utility sector are now becoming more possible and this will release efficiency benefits in our operations.
- Our [Open Data strategy](#) clearly and publicly sets out our aspirations, ambition, and commitment to driving value for our customers, society, and environment through opening up our data.

We will develop the grounding for a smart network for wastewater and water, which will use realtime data to enable us to be dynamically proactive in reducing pollution and leaks within our network and to benefit our customers. There are several current projects that are starting to use realtime data, for example, to reduce our energy consumption at pumping stations, detect wet weather blockages and avoid spills into the environment and detect water quality issues before they reach the customer.

Leading in innovation

Innovation is central to how we work across the whole business and 'innovative' is one of our core values that is reinforced and celebrated across the year. Our annual Innovation Festival is now very established and highly anticipated nationally and globally. The novel format of the festival enables us to attract a diverse audience which is a critical part of design sprints.

Since our first Festival we have taken >250 ideas back into the business and put more than £1.5m back into the local economy, demonstrating our convening power to bring others into our regions. The festival output projects cover many aspects of the business, including the sector changing No Dig pipe fix product which we have used in hundreds of live trials with great promise.

The outcome of the most recent Innovation Festival in 2023 has yielded 42 project with a potential value of £170m over five years. Applying our four out of ten failure rate, this is an annual value at minimum of £12m. This is in addition to six Ofwat innovation bids potentially worth £12m. All these projects are open to the UK water sector, and we are partnering with many companies helping to push the boundaries on these tough challenges for the benefit of all UK customers.

As part of our Innovation Festival, we designed a mobile pumped waterstorage unit (MOWBI) that can be transported to single properties experiencing a loss of water which temporarily restores water to the property (at a sufficient pressure), until a more permanent resolution can be put in place. We are very proud that our teams have taken this innovation from the conceptual stage through to the point of delivery as we have fully rolled out the MOWBIs in Essex. They are particularly useful in events where we find a more complicated repair or there is a health and safety reason. These new units have been particularly effective at reducing supply interruptions of greater than 12 hours as these interruptions typically impact single properties.

We remain the highest scoring company for innovation in [British Water's annual UK Water Company Performance Survey](#).



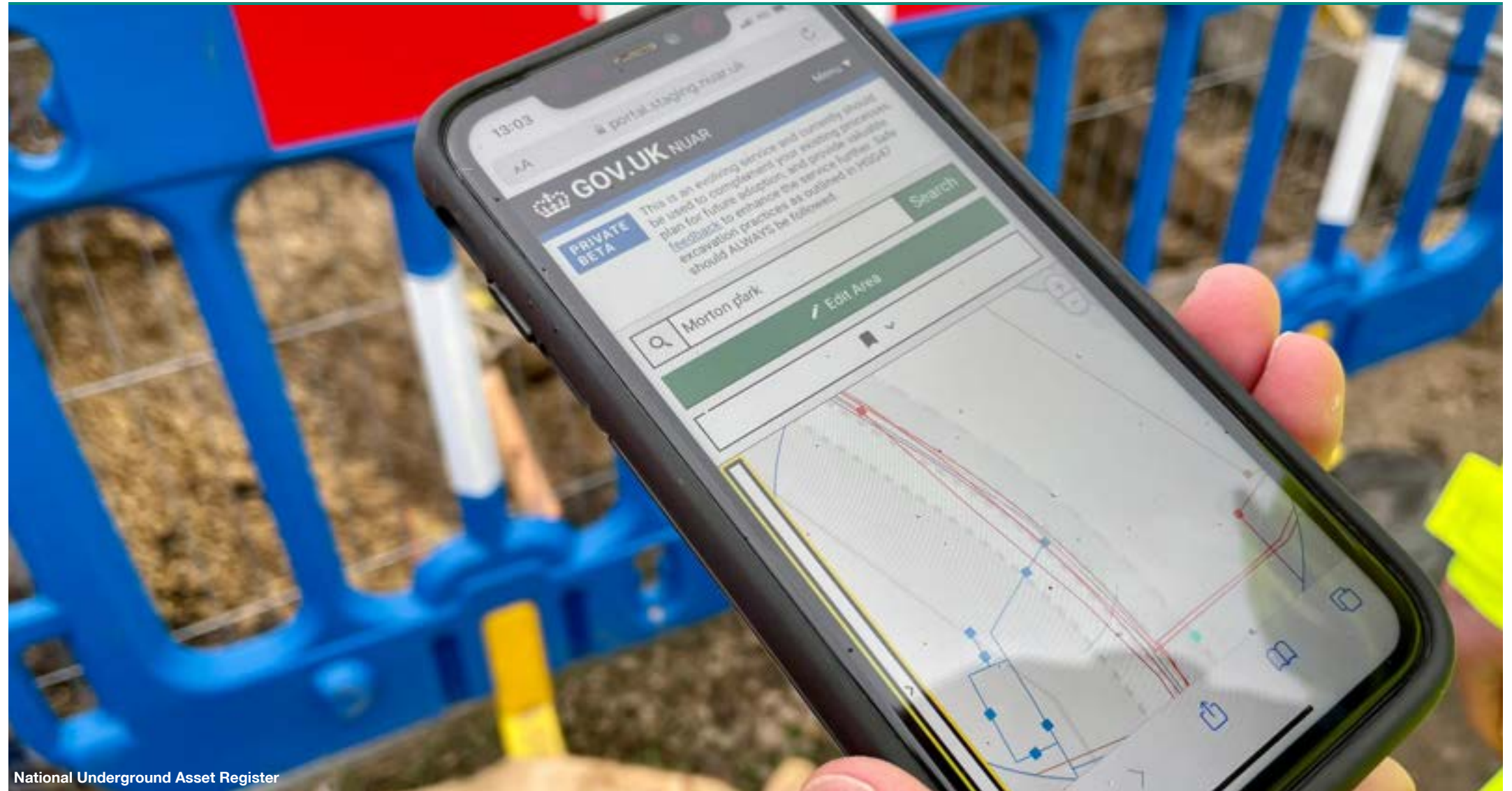
Interactive digital mapping

Developed at our 2017 Innovation Festival, NUAR (National Underground Asset Register) sees existing data on underground pipes and cables brought together in one single, digital map to display where electricity and phone cables, and water and gas pipes are buried. We were extremely proud to see this being launched by the Geospatial Commission in April 2023, initially covering North East England, Wales and London ahead of a national roll out over the next two years.

The estimated total monetised benefit of the NUAR programme is c.£3.4bn, which is c.£347m per year over ten years. This is based on three estimated benefits:

- Savings from reduced utility strikes, saving c.£240m per year.
- Reduced costs of sharing data, saving c.£91m per year.
- On-site efficiency improvements for projects, saving c.£16m per year.

A widely reported industry statistic of 60,000 strikes per year on buried service pipes and cables per year was used as the basis of the strike reduction benefits. The economic costs of utility strikes alone are therefore estimated at c.£2.4bn a year.



National Underground Asset Register

Attracting private investment with fair returns

Such a large investment programme increases risk. To deliver it shareholders will need to invest around £400m on behalf of customers to enable these necessary improvements with the remainder coming from debt finance.

It is critical that the sector can attract this investment to be able to deliver the benefits to customers and the environment that we all want to see. Current returns in the sector have more than halved since 2016 and they are also below Ofwat’s expectations for this period as they set out in PR19.

The future returns proposed are well below comparative sectors that investors could choose to invest in with returns in debt markets above the equity return Ofwat has suggested. Ofwat’s ‘early view’ of the allowed return to equity for PR24 is around 6.22% in nominal prices. This figure is below current market rates for BBB+ rated corporate debt at 6.3% which have much lower risk. This raises an important question around why a rational investor would put substantial new equity capital into the sector when a higher return can be achieved in lower risk debt markets.

To secure the scale of investment needed at PR24 a recalibration of the risk-reward balance is needed otherwise we will not attract the investment we need and fail to deliver the improvements to the environment and service levels that customers want to see.

Markets have experienced significant volatility and under our proposals over c.£90m will be returned to customers if interest rates fall as is forecast²¹.

Our dividend policy, which we amended ahead of Ofwat’s new licence condition in 2022, already requires that dividends paid reflect service performance to customers. Throughout the current 2020-23 period the dividends we have paid amount to c.4.5% of return on regulated equity under the notional company structure – consistent with Ofwat’s expectations as set out in [PR19](#).

Our performance related pay arrangements are also consistent with our values including being an ethical business. These arrangements ensure that rewards are only earned when we meet and exceed the best levels of service in the sector and were recognised as [best practice in 2021 by Ofwat](#).

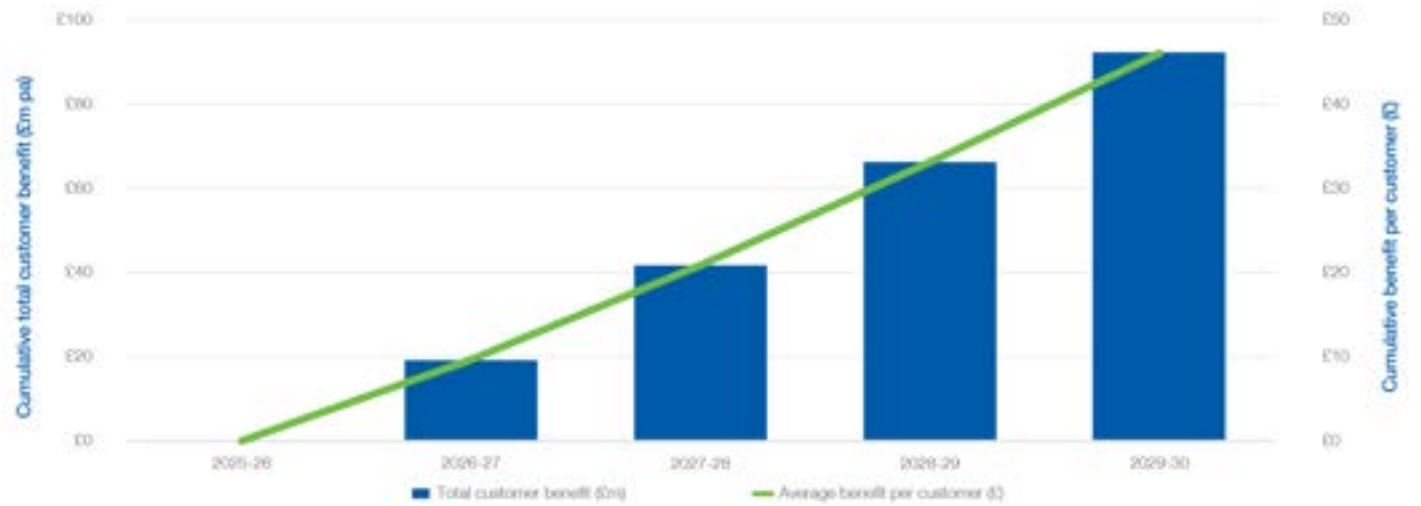
21 Economic Insight, August 2023, Estimating the customer benefit of indexing the RfR. Analysis for Northumbrian Water

Figure 18: Ofwat’s ‘early view’ allowed return compares unfavourably to other benchmarks’



Note: Ofwat’s early view return taken directly from PR24 methodology statement and not updated for market movements.

Figure 19: In year customer benefit of indexing the risk free rate over PR24



Driving growth in our local economies

As one of the largest businesses in the regions we operate in, it is important to maximise the positive impact of our spending. We prioritise working with local supply chains that uphold our social, economic, and environmental standards – and share our vision of continuous improvement. As part of this, throughout 2025-30 we will continue to spend at least 60p of every £1 with suppliers in our regions.

The supply chain will need our support to help us deliver everything in this Business Plan, and we have transformed our approach (see our [Appendix A6 – Deliverability and past performance](#) (NES07)). This includes launching our [Responsible Procurement Strategy](#) in 2022.

In 2021/22 we began measuring the impact our supply chain has on the local economy. Our research found that our suppliers re-spent £139m across our operating area. This included £51m spent on employing local people. Our local suppliers created 2,131 jobs and 239 apprenticeships, supported by their contracts with us. They also contributed 72,694 hours of employee volunteering to the communities we work in.

We have integrated social value into our tendering processes, driven by our responsible procurement

strategy. Consistent with County Durham Pound, a social value knowledge hub, we are using the National TOMs (themes, outcomes and measures), a widely-used framework for delivering excellence in measuring and reporting social value. Working in partnership with our suppliers, we will deliver social value benefits including local jobs and training, community jobs and volunteering, environmental improvements and social innovation.

We contribute around £1.1m a year financially through community and other donations with the leveraged figure estimated to be c.£10m. We also give time and expertise through our company volunteering initiative, Just an Hour, and working with community groups to address their own challenges at our Innovation Festivals. In work time, around 50% of our employees spend time volunteering every year.

Our 2025-30 Business Plan will create significant opportunities for local economic growth and community development. The increased capital investment of c.£3.6bn, up from c.£1.6bn in the current period, will allow us to work closely with local suppliers and partners to build local skills and capabilities.

We will invest in early careers while working to the principles within our [TIDE \(Together for Inclusion, Diversity and Equity\) Strategy](#) and creating

local jobs. Our focus will be on establishing new training academies and apprenticeship programs to develop the current and future workforce needed to deliver on our ambitious commitments.

Overall, the substantial increase in targeted investment will spur economic and social progress in the regions we serve. We recognise the need to develop local talent, give back to our communities and promote sustainable growth across our supply chain.

In collaboration with [Constructing Excellence in the North East \(CENE\)](#) we have led research to understand the scope and scale of the region’s capital investment programmes, and the capacity and capabilities within the supply chain to deliver on this regional need.

Our partnership approach

While we play a crucial role providing essential services, we can only be effective by working in partnership. We recognise there are areas where we must lead, but we do not have all the answers or resources. In other areas, our partners are better placed to lead. Over time, we have built a strong record of effective partnerships. The Northumbria Integrated Drainage Partnership (NIDP) brings together organisations to deliver flooding strategies and is frequently cited as a leading approach.

We were one of the first companies to establish and promote the early Catchment Based Approach (CaBA) partnerships in our Essex and Suffolk areas though our long standing Trinity Boards partnership, which has been able to restore habitats to their full potential for more than 25 years. We have taken an innovative approach to catchment solutions through our strategic partnership with The Rivers Trust. By creating our North East Catchments Hub (NECH), we have connected with catchment partners representing communities across the North East, ensuring the solutions developed are endorsed by stakeholders and will deliver real benefits for customers.

On affordability we partnered with National Energy Action by funding their Water Poverty Unit, a hub for research and sharing best practices to benefit the sector. ‘One Call’ is a project between us, Believe Housing and Money and Pension Service to provide debt advice to struggling customers through data sharing.

Working together gives more funding, perspectives and access to achieve the best solutions for customers and environment. Combining capabilities and resources delivers more than any one organisation alone and we will continue to seek opportunities to collaborate for greater impact.

Supporting customers and addressing affordability

- **We offered the largest bill reduction in sector in 2020** - an 18% fall versus a 12% reduction on average across the sector.
- **Average bills in the North East are below the industry average** – we expect this to remain the case even after this plan is implemented.
- **To deliver improvements to customers bills will need to rise by between 12-20% before inflation** - in Essex and Suffolk bills will need to rise by 9-10 pence a day and in the North East bills will need to rise by between 19-21 pence a day
- **Phasing investments to reduce the impact on bills** in line with customer feedback.
- **Delivering c.£400m of efficiencies** from our position as one of the most efficient companies in the sector through ongoing improvements and leveraging new innovations.
- **Eradicating water poverty** - making sure that nobody will spend more than 5% of their disposable income on water bills.
- **Expanding our support for all customers** with affordability challenges from c.£40m in the current period to c.£170m - more than a four-fold increase in support.
- **Introducing a new c.£20m shareholder funded hardship scheme** to help those that need it most.



In our [‘pre-acceptability’ research](#), we asked customers about their views about steady increases versus a sharp increase in the first year, then remaining flat.

Most customers preferred a steady increase, saying that for example, “with the cost of living up as a whole, it would be easier to manage little steps than having it one step, then staying the same, then having another increase”.

Some customers preferred a sharp increase in the first year, then remaining flat, saying that for example “if you get the increase initially and immediately, it’s paid, it’s done... that makes it easy and it’s for peace of mind – you know what you’ve got to pay for four years”.

Ensuring affordable services

Our bills are below the sector average and even after this plan we still expect combined bills in the North East to be the lowest in England.

In 2020 we offered the largest bill reduction in the sector at 18%, compared to an average reduction of 12%. This immediately moved 185,752 customers out of water poverty in 2020, ahead of our original target of 125,000. By the end of 2022, our zero water poverty action plan has helped over 190,000 customers in water poverty through bill reductions and support tariffs but the challenges we are facing are constraining our ability to meet our goal.

Historical investment in our Abberton Reservoir and the ongoing need for investment to maintain resilient water supplies means water bills in Essex and Suffolk will remain high compared to water only bills across the sector. However, bills have since risen by the lowest amount as other companies now invest to catch up.

To deliver the improvements to customers and the environment in this plan bills will need to rise by between 12-20% before inflation. In Essex and Suffolk bills will need to rise by 9-10 pence a day and in the North East bills will need to rise by between 19-21 pence a day. The final bills that customers pay will also depend on the allow allowed return that investors make on the capital they invest.

We discuss this in the ‘Delivering fair investment’ section where we explain the concerns we have about the ‘early view’ return that Ofwat has set out and the need for us to set out an ‘alternative return’. We show the final bills profiles that customers will pay under either scenario in Figure 20 overleaf.

This increase will be phased across the next five years to provide gradual bill increases in line with customer preferences for stable bills. Customers also stated that they would prefer increases in bills to start sooner, spreading increases across different generations of bill payers²².

Making sure bills are affordable for all our customers is our aspiration, that is why we set an ambition at the last price review to eradicate water poverty.

Our customers are facing a cost-of-living crisis with energy, food, and fuel costs rising. More than a third of areas in the North East are among the most deprived in England, with incomes 15% below the UK average.

In Suffolk, several areas have the highest deprivation levels in the country, such as Great Yarmouth and Lowestoft, whereas Essex is home to a growing gap between the most and least deprived districts.

²² NWL A&A Testing qualitative research; Page 140 and 2023, NWL A&A Testing quantitative research, page 69

Despite having high acceptability of plan in our affordability and acceptability testing, around half of our household customers had concerns about the affordability of our plans²³ – so we know we need to offer more support.

Bill rises are always unwelcome at this difficult time. We want to make sure our plan requires no more of an increase in bills than is necessary and that it is in line with the plan customers tell us they support.

That is why our plan has carefully considered the phasing of investments between the 2025-30 period in line with customer preferences, including: Challenging Government and regulators on behalf of customers where their requirements would drive significant affordability pressures or did not appear to be cost beneficial.

For example we raised concerns about the affordability of the [Governments Storm Overflows Discharge Reduction Plan](#) (SODRP) in our response to that consultation, we wrote to the Environment Agency in May 2023 and made suggestions that could have removed c.£600-700m of investment from customer bills. We have engaged consistently with the Environment Agency in support of our nutrient neutrality proposals which could save customers over £250m in capital costs and sought

opportunities to agree c.£130m of investment from the wider environmental programme.

Around 90% of the enhancement investments in our plan are in support of legal requirements from Government and regulators.

But we presented customers with options for each of the material investments in our plan where we had genuine choices through our qualitative affordability and acceptability testing and followed the feedback we received.

For example, our plan meets the requirements of the Government’s [SODRP](#), which drives around £1bn of investment. However, we phased that investment in line with the preference customers showed for our preferred plan from our qualitative affordability and acceptability testing²⁴ and DWMP and other research²⁵.

“... at the end of the day, we need the environment to be safe and sound for us... it seems a bit expensive, but I care about the environment ...
Deliberative workshop 1, NW

23 2023, NWL A&A Testing quantitative research, page 45

24 2023, NWL A&A Testing quantitative research, page 170

25 2023, NWL PR24 Line of Sight (Appendix A7.1), section 2 Storm Overflows

Table 1: Forecast bills changes for customers under Ofwat’s ‘early view’ return and NWL’s alternative return.

Using Ofwat’s updated ‘early view’ return		2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Northumbrian water and sewerage bills excluding inflation	£ per year	393	406	419	434	448	464
Northumbrian water and sewerage bills including inflation	£ per year	431	454	478	505	532	561
Essex & Suffolk water bills excluding inflation	£ per year	257	264	269	276	282	289
Essex & Suffolk water bills including inflation	£ per year	283	295	307	321	335	350

Using our ‘alternative view’ return		2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Northumbrian water and sewerage bills excluding inflation	£ per year	393	411	425	440	454	470
Northumbrian combined bills including inflation	£ per year	431	459	484	511	539	569
Essex & Suffolk water bills excluding inflation	£ per year	257	266	273	279	286	293
Essex & Suffolk water bills including inflation	£ per year	283	297	311	325	339	354

Note: Our maximum bill increases by 2030 before inflation are £470 for combined average bills in the North East and £293 for water bills in Essex and Suffolk. Our Affordability and Acceptability testing used a £470 combined bill in the North East and a £303 water bill in Essex and Suffolk.

We also included additional nature-based or hybrid solutions with additional costs based on customer support for those²⁶.

We are still discussing changes in our programmes for water quality monitoring, septic tanks, and removing nutrients with our regulators. These changes could reduce our forecast bills for 2029/30, and this could be around £5 per year.

And we removed some more optional investments where they were not supported by customers. For example customers did not support our enhancement case for additional investment to meet net zero so we removed that investment from their bills²⁷.

We have sought opportunities to deliver improvements through partnerships wherever possible to maximise the impact of our investments and share the cost burden with others beyond customers.

At the same time customers did not want to pay for service improvements and so our plan proposes less improvement in some service areas that were a lower priority for customers.

26 2020, Drainage & wastewater management plan report: phase 1 customer research
27 2023, Pre-acceptability – Part B, page 70

Our plan will leverage at least £100m in partnership funding. Our plan will also require around £400m of efficiencies to be delivered from an already efficient position - as the second most efficient water and sewerage company across the sector.

We will also make sure there is enough support for customers, so no household spends more than 5% of their income on water bills. We are expanding our support for all customers, for example by providing more water efficiency advice and working with partners to help customers maximise their incomes, as well as a threefold expansion of our social tariff support.

“For me, I think the high investment option would be the better one to go for. ... if you pay a little bit extra now and get it all done with and then hopefully, we won’t have this problem again in the future. So, for me, it’s definitely the high investment option”
(Online workshop, NW, Wear)

“I have to say definitely the high investment. The notion that as consumers we are harming the environment ... cannot be justified”
(Online workshop, NW Northumberland & Tyne)

Table 2: Number of customers we expect to be in water poverty by 2030 and how we intend to help them out of water poverty.

Interventions to address affordability challenges	Estimated number in water poverty by 2030 (5%)	Estimated number of customers we expect to remove from water poverty through interventions	Overview
Social Tariffs		282,244	Customer research supports a larger cross-subsidy in line with the sector to help address affordability.
Watersure		42,020	Watersure is the national social tariff.
Metering and water efficiency		49,950	Around 60,000 customers will see a saving from metering, but 110,000 will see bills increasing. Installing meters will allow us to target water efficiency initiatives more effectively removing around 100,000 customers from water poverty.
Income Maximisation		25,000	We support 25,000+ customers to maximise their income but will take this many customers out of water poverty with this intervention.
Tariff Innovation		9,175	New tariffs can help to remove some customers from water poverty.
Hardship fund		50,000	A new hardship fund provided through shareholder support will help a further 50,000 customers.
Total water poverty estimate (@ 5%)	400,000	458,389	Our plan will see no customer spending more than 5% of their income on water and wastewater bills by 2030.

Our approach to tackle water poverty

From our research²⁸ we have a deep understanding of which customers are struggling now and anticipate that they will struggle even more in the future. We will be able to use this insight to target support for customers who are struggling the most.

Our plan continues to focus on supporting the households who need the most help²⁹ – with our new definition of water poverty, this means the more than 400,000 customers who need support most.

We will do this through:

- **Social tariffs** – we will align our social tariff scheme more closely with the ongoing industry work to improve consistency in the support that companies offer their customers. We will continue to focus on the relationship between water bills and household incomes (after housing costs), and offer a ‘tiered’ discount (as recommended by NEA and others, and as discussed for the national social tariff).

- **Metering** - our affordability plan needs to support compulsory (progressive) metering delivery in Essex and Suffolk, focusing on providing ‘on the ground’ help. For example, helping customers during the compulsory transition to smart meters by deploying water efficiency tips, household retrofits, and leakage detection and repair to reduce customer bills. This would be supported by a two-year ‘no detriment’ guarantee, and regular ongoing feedback on usage and opportunities to save.
- **Water efficiency** - studies show that between 200 and 400 litres of water per day can be saved by repairing just one leaking toilet. Up to 8% of all toilets in homes across our operating area are estimated to leak. This presents a significant opportunity to repair toilets, educate customers on the amount of water wasted daily and reduce bills. We will use data from our metering programme to help identify who could benefit from support.
- **Income maximisation** - debt and financial advice are vital in supporting customers who are struggling with bills, and we actively promote and encourage customers to access these services. We will work closely with debt advice providers, such as Stepchange and Money Advice Trust, to signpost their services and financial support to make sure they can fund this critical work. We have also developed online benefit checking and tariff eligibility tools with Policy in Practice and Anglian Water to help our joint customers get the support they are entitled to.
- **Tariff innovation** - we have also looked at innovative tariffs that could help customers save money, such as reducing standing charges to allow customers to reduce their bills where they were using less water. We will trial a water-saving tariff alongside our smart metering programme next year to reward customers who reduce their consumption.
- **Building awareness of our help** – there is a significant challenge across the sector to raise awareness and take-up of financial and non-financial support. We place particular emphasis on delivering effective customer assistance schemes and we will continue to identify and engage with customers in vulnerable circumstances and improve the breadth and uptake of support we offer. It is also vital that our employees have awareness of the broad range of needs of our diverse customers and have tools to support customers and we will deliver further Inclusivity Awareness training.
- **Financial hardship fund** – from 2025 we will introduce our new Financial Hardship fund, with a £20m contribution from our shareholders over the next five years. This is new support from our shareholders from 2025 onwards and in addition to current commitments.

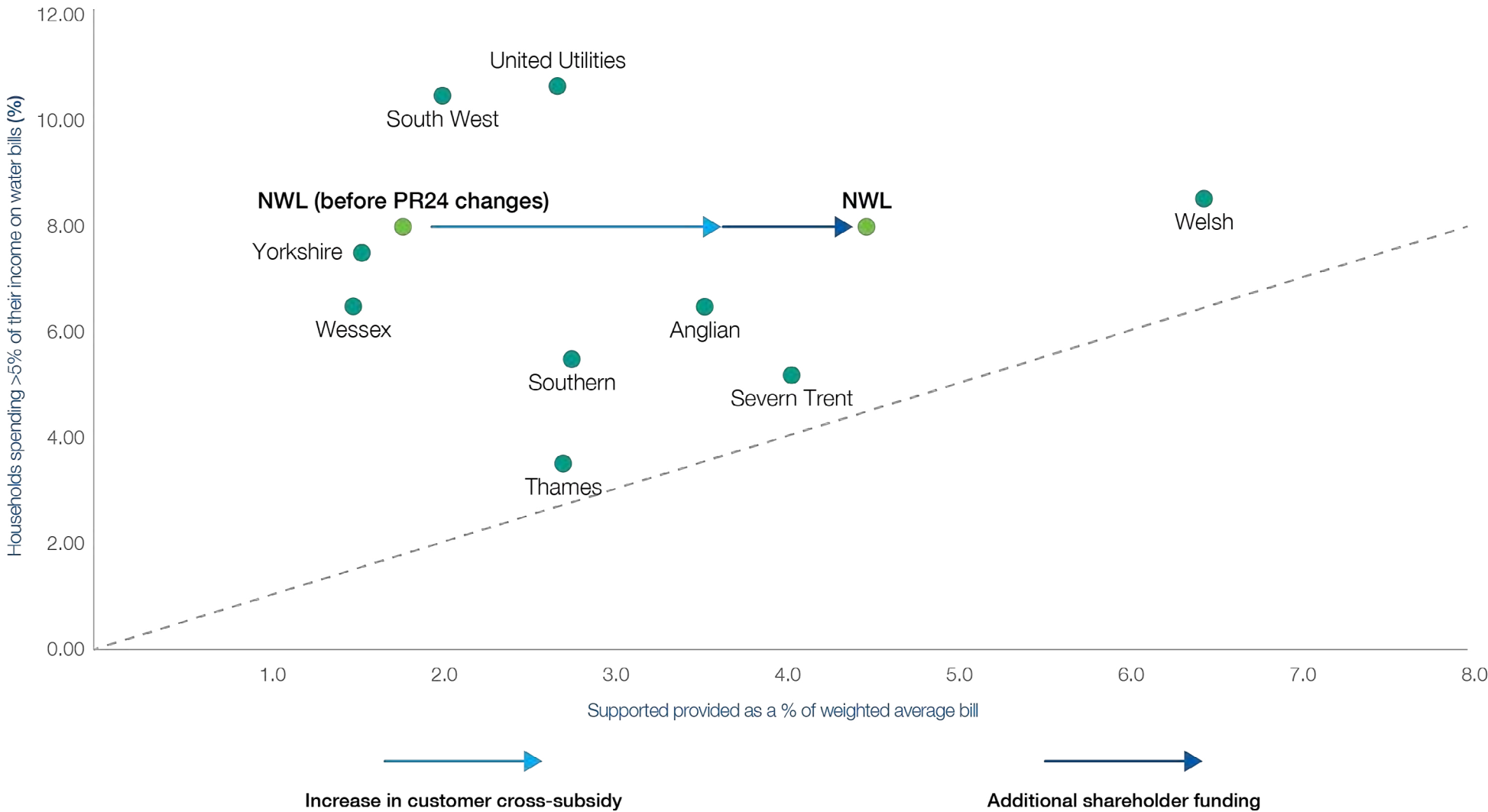
28 2023, NWL A&A Testing quantitative research
29 [Appendix 1: Customer affordability, section 5](#) (NES02)

Figure 20: Supporting customers with our largest affordability package ever - water poverty incidence (at 5% level) compared to support provided

Overall, our affordability support package for the next five years is around £170m, more than four times the size of the c.£40m package we put in place for the current period. We are also offering a new £20m hardship fund, provided by shareholders, for those struggling the most.

Our analysis of water poverty across other water companies and the support they provide currently shows that our plan for supporting customers in 2025-30 will be one of the most ambitious in the sector, with one of the highest levels of funding support compared to the size of our water bills.

Figure 20 shows only support through social tariffs and hardship funds, including revenue foregone, as these can be compared across companies.



Source: [CEPA work](#) for Water UK and NWL analysis of APR 2022/23

Supporting customers in vulnerable circumstances

Our action plan to improve performance for customers in vulnerable circumstances has been a success thanks to an innovative approach to partner working and data sharing.

We have moved from a low position in the industry to be one of the top three companies, putting us on track to deliver against the most ambitious and toughest target for this measure in the industry.

We are building on this, and we will further extend engagement and improve our service offering for our PSR through a number of key initiatives.

Addressing affordability and inclusivity involves more than just tackling water bills and incomes. We want all our customers to feel included by the way we provide our services to them.

Anyone can find themselves in vulnerable circumstances, either temporarily or over the long-term, from a broad range of personal characteristics, situations in life, or economic factors.

Our [Affordability and Inclusivity strategy](#) sets out what we are doing to support customers who need different services, or for us to deliver these services in a different way.

We will increase awareness of our financial support and Priority Services through strategic partnerships, understanding customer needs and providing appropriate tools and support services.

Increasing inclusivity awareness among employees and fostering a diverse workforce are at the core of our Purpose and values.

Our [TIDE Strategy](#) (Together for Inclusion, Diversity and Equity), outlines our commitment to a workforce representing the different cultures, backgrounds and viewpoints of the communities we serve, which in turn enables us to better empathise with our customers and provide an unrivalled customer service.

Support for All: Leading on the build of a cross-sector PSR hub

Working with a consortium of partners, we aim to streamline assistance to vulnerable customers by eliminating the need for multiple registrations and ensuring accurate data sharing.

At our 2021 Innovation Festival, a shared PSR (Priority Services Register) data solution was introduced. In February 2022, a collaborative design workshop with over 60 participants from 30 organisations focused on creating a fully supported PSR journey for water and energy at a regional level.

Support for All was born with the primary objective of creating a hub that securely hosts data on customers in vulnerable circumstances. By submitting their details once, customers no longer need to register separately with each utility company, reducing administrative burdens and improving the user experience.

The hub will ensure accurate data sharing among utility companies, eliminating the risk of missed or inadequate support due to incorrect information, meaning we can offer timely and tailored support to our vulnerable customers when they need it the most.

With the pilot's positive outcomes, we are actively exploring opportunities to scale up the Support for All platform, expanding its geographical reach and incorporating additional sectors beyond utilities, such as local authorities and healthcare.

This broader implementation would create a national PSR platform, delivering enhanced support to a wider range of vulnerable customers with the potential to transform the provision of assistance across multiple sectors.



Reflecting the views of our customers and stakeholders

How we have reflected the views of customers and stakeholders

Our plan focuses on what matters most to customers and communities and we work hard to make sure the customer voice informs the delivery and design of our services. We track the views of our customers and stakeholders over time and triangulate this with other evidence across the business.

Over the past two years we have seen a significant expansion of the legal obligations that we need to meet which will drive new investment requirements, around 90% of our enhancement investments are driven by legal requirements.

Nevertheless, we have engaged extensively with customers over the past two years and sought to improve the quality and rigour in our engagement from our approach at PR19. Given the context we have focused our engagement activities on those aspects of the plan where customers can make genuine choices, like phasing investments to balance legal obligations with affordability.

We have also worked hard to understand customers' priorities for service improvement and challenged any non-statutory investments hard given the scale of bill increases. This includes not just our household customers but also businesses, other non-household customers and developer customers.

We have followed a structured process of engagement with customers, starting with what we already know about their views and preferences, tackling difficult long-term questions through our new 'People Panels' and carrying out specific engagement around our proposed investments to give customers real choices. All our research has been carried out by independent accredited market research experts, and where applicable, in line with the detailed guidance provided by Ofwat and the [Consumer Council for Water](#) (CCW). This has been assured by the Water Forum Customer Engagement Panel.

We have deeply involved stakeholders through development of this plan including businesses and local authorities. This includes detailed, structured engagement on our [Drainage and Wastewater Management Plan](#) and [Water Resources Management Plans](#). We also carried out detailed engagement on our WINEP, including through the work of the North East Catchments Hub.

Our regular programme of stakeholder engagement has provided opportunity for discussion and consultation on several issues contained in our Business Plan. These include work on our water environment, greenhouse gas reductions, asset health and [Long-term strategy](#) (NES_LTDS). Stakeholder groups involved include local authorities, environmental NGOs, business organisations, supply chain partners, MPs, voluntary organisations, vulnerable customer representatives and emergency services. Specific pre-acceptability testing was carried out involving representatives across these groups.

We held an open session with customers and stakeholders through a '[Your water, your say](#)' event that was established and facilitated by our regulators Ofwat and CCW. We replicated that session with members of our [People Panels](#).

The last time prices were set by our regulator both Ofwat and the Competition and Markets Authority (CMA) placed [less weight on the views and perspectives of customers and their representative groups](#) than we would have liked, citing concerns about the independence and effectiveness of that evidence.

We have strengthened the challenge and independence of our Water Forum by bringing in new people with specific skills around market research, customer engagement, and economic regulation to provide the most robust challenge to our plans.

We provided a dedicated secretariat function to the Forum and funding to enable them to best challenge the detail of our plans. We also updated the arrangements in line with the recommendations of a review of these groups that was carried out by [CC Water](#). Its views on the final plan can be found in [its reports](#).

What customers have said

We publish all the research we carry out on our website in our [research library](#).

Alongside our plan we have published two ‘customer research summaries’ – bringing together our insight into customers’ views from all our research covering Common PCs³⁰ and Enhancements and Other Service Areas³¹. We have also published our triangulated prioritisation of common performance commitments.³²

To bring all customer research together and in support of [Appendix 7 – Customer and stakeholder engagement](#) (NES08), we have triangulated evidence for our proposed enhancements published in our Line of Sight³³ which further demonstrates how customers’ views have informed the development of our Business Plan.

In Essex and Suffolk, we are forecasting that – without any action now - there will not be enough water resources available to meet demand over the next 25 years. This creates a legal requirement for us to invest now and our customers recognise the urgency to prevent this, as well as this being a legal requirement³⁴. Testing showed customers strongly support company leak reduction as a quick, high-impact

30 PR24 Customer Research – Common PCs Insight Summaries
31 PR24 Customer Research – Enhancements and Other Service Area Summaries
32 PR24 Customer Research – Prioritisation of Common PCs
33 [2023, NWL PR24 Line of Sight \(Appendix A7.1\), section 7](#) (NES08)
34 2023, NWL A&A Testing qualitative research, pages 100-107

option. They prefer demand solutions that directly help them save money and reduce their footprint.³⁵

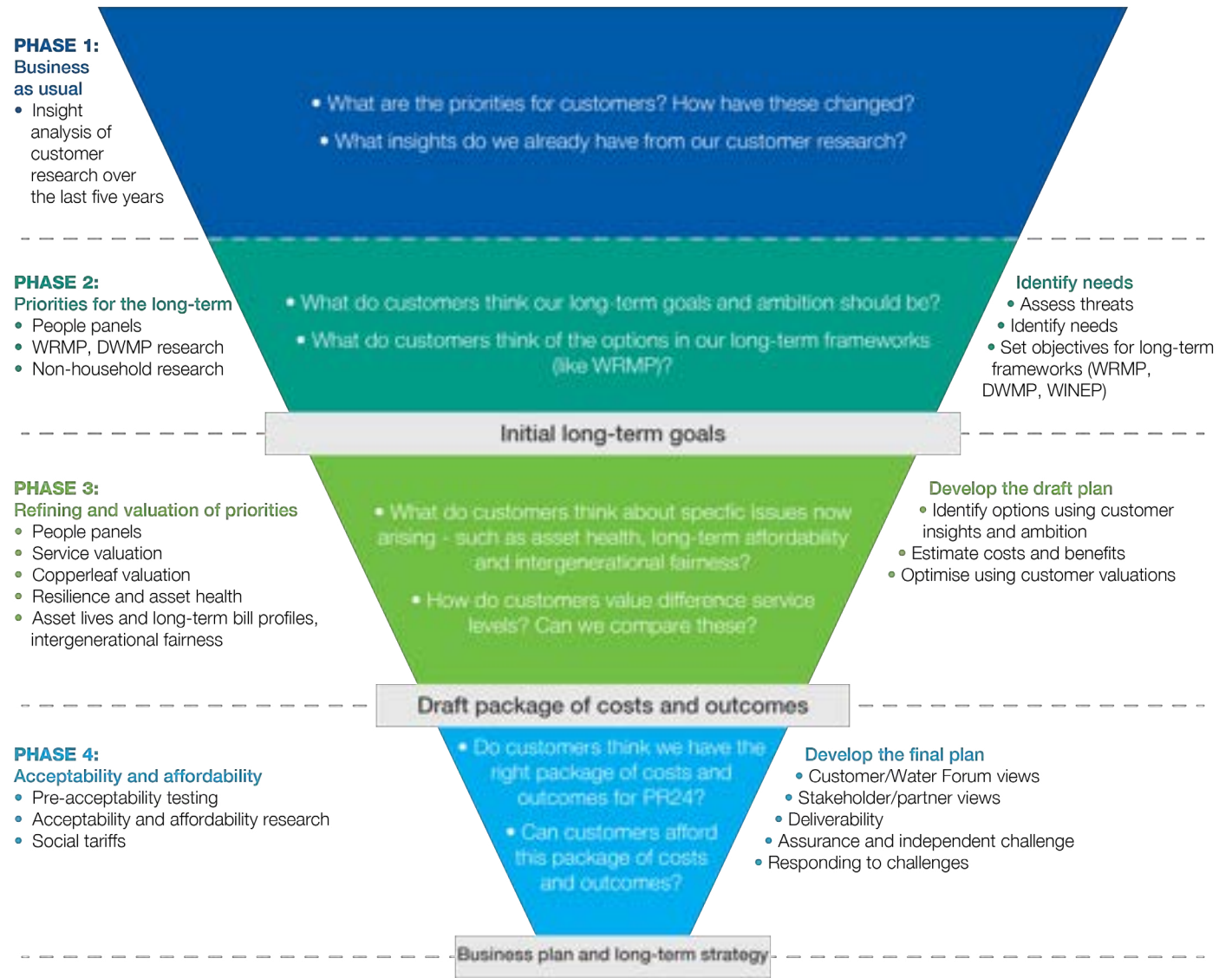
In the North East we have significant new legal requirements to improve the environment, reducing our impact on rivers and coasts and including long-term improvements to river and bathing water quality by reducing the number of active SOs.

We share ambitions to improve the environment and it is increasingly important for our customers, but they are also concerned about bill rises and affordability given the current cost of living pressures³⁶.

We offered choices about how quickly we should address these issues by 2030 and provided different options including more nature-based solutions with lower carbon impacts that would cost more in bills. Our final plan reflects those preferences.

35 2022, WRMP options – Essex & Suffolk Water
36 2023, Pre-acceptability – Part B and 2023, NWL A&A Testing quantitative research, page 45

Figure 21: Our approach to customer engagement for PR24



In our qualitative affordability and acceptability testing, we asked customers about three possible phasing options. Customers preferred our ‘middle’ option (which is the option we put forward in our enhancement case), including the use of nature-based solutions in some cases where these were ‘best value’ as they had additional environment and social benefits³⁷.

We offered customers choices about investing more in other areas too. For example, if they wanted to accelerate progress towards net zero or do more for the environment beyond our legal obligations.

Generally, customers have chosen not to go much further than the legal obligations, which are already very ambitious.

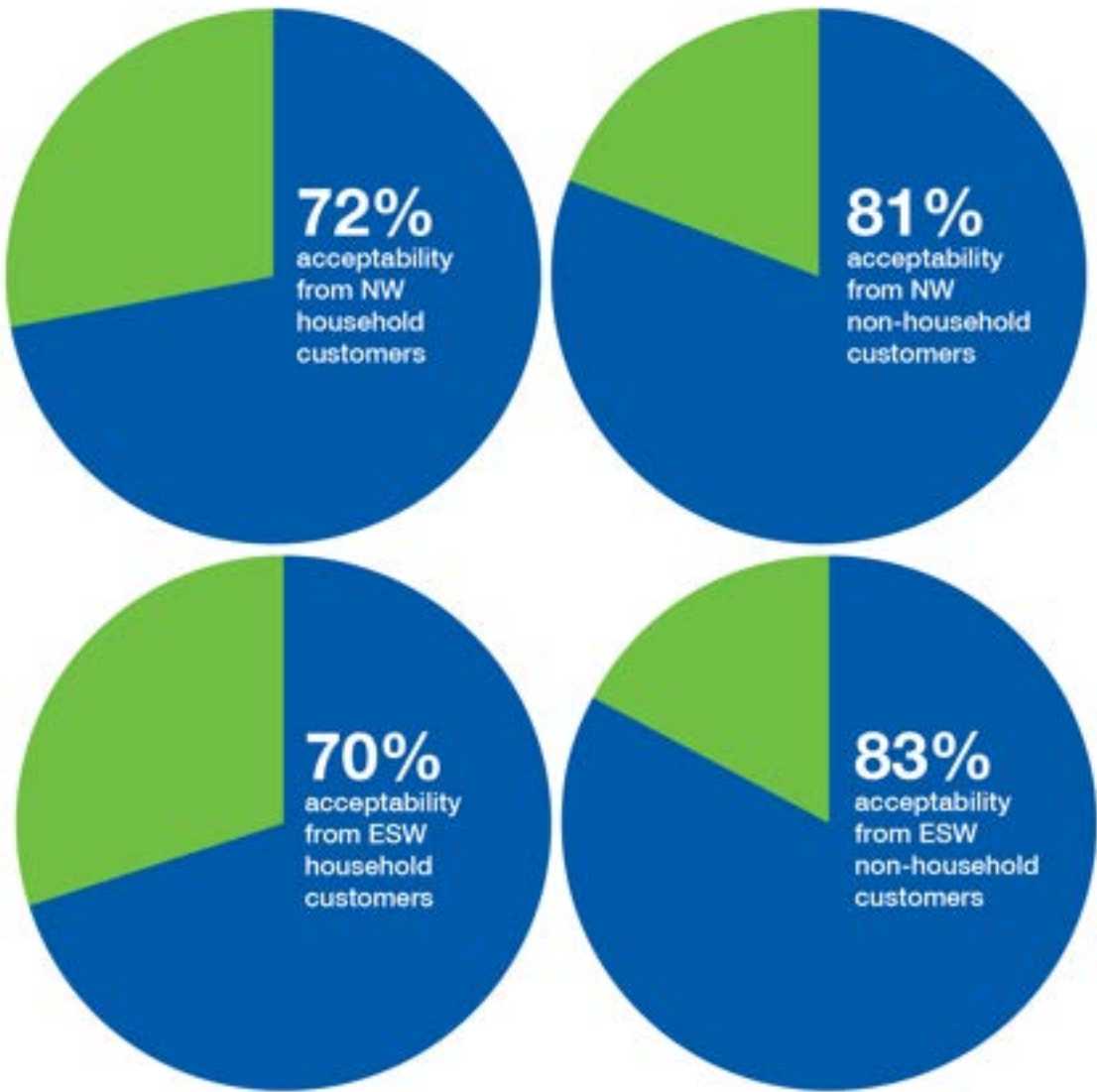
Across both regions, there was a general agreement that the customers should not be solely responsible for paying for the investments in the form of increased bills³⁸.

Customers were supportive of nature-based solutions over hard engineering alternatives³⁹, and they told us that they expect us to work with others in our regions to solve difficult problems⁴⁰. In creating our Business Plan, we have done this more than ever before.

We have used existing successful partnerships like the Northumbria Integrated Drainage Partnership (NIDP) but also established new ones like the North East Catchments Hub; working closely with organisations such as the Rivers Trust and to understand the best ways to tackle environmental challenges. We have worked hard to limit an increase in bills to only what is necessary, and we are focused on finding innovative and less expensive ways of tackling these issues.

Overall, across our affordability and acceptability testing 74% of customers supported our plans reflecting this challenge. Overall 46% of customers considered that our plans would be difficult to afford, reflecting the greater need for support for customers that is part of our final plan.

Figure 22: Our affordability and acceptability results



37 2023, NWL A&A Testing qualitative research, pages 108-112
38 2023, Pre-acceptability – Part A, pages 45-49

39 2020, Drainage & wastewater management plan report: phase 1 customer research
40 2023, Pre-acceptability – Part A

Our [Long-term Strategy \(LTS\) \(NES_LTDS\)](#) sets our targets for 2050. We consulted on a draft of this strategy and carried out specific engagement with customers through our People Panels, as well as with key stakeholders ahead of completing our final LTS which is published alongside this Business Plan⁴¹.

Meeting our ambitious long-term targets

In setting long-term targets for 2050 we have considered the commitments we have already made in our existing strategies and plans as well as the improvements we are legally obliged to deliver. We have then focused on what our customers and stakeholders want to see improvements in and sought to understand their appetite to pay for those improvements.

Our Business Plan for 2025-30 continues the journey to meet the long-term targets that we have established to 2050. We want to make sure that we are on the right trajectory to meet those targets and this plan achieves that in most instances, for example our plans:

- For leakage are consistent with a 50% reduction by 2050.

- For PCC are consistent with achieving 110 litres (a cut of over 20% from current national average consumption levels) per household per day by 2050 and a 1.9% reduction in non-domestic consumption, from the government’s [National Framework for Water Resources](#).
- Will reduce sewer overflow activations to ten or less per year by 2050.

As a result of feedback from customers there are three instances where our plan proposes to go more slowly than we originally intended, which will create a need to catch-up more in future periods, these include:

- Sewer flooding, where customers were not prepared to pay for the improvements⁴² to put us on a straight trajectory to a 60% reduction by 2040 but our plan still targets an upper-quartile position across the sector for internal and external sewer flooding by 2030, driving down external flooding by c.45% from 2020/21. Customers do support our long-term target of reducing both internal and external sewer flooding by 60% from our 2024/25 performance commitment level by 2050.
- The removal of lead pipes by 2050, where our plan still involves a substantial step up in investment but where more will be needed in future to meet the 2050 target.

- Net zero, where our comparative performance on emissions using a market-based assessment places us second for wastewater and fifth for water. We continue to focus on reducing our operational emissions, but customers were not willing to pay for enhancement funding to deliver net zero in 2025-30. Instead we are committing to deliver the [Science Based Target initiative](#) (SBTi) approach and the Carbon Trust’s [PAS 2080](#) standard to ensure we deliver the greatest decarbonisation benefits. Our plan also continues our drive to reduce scope 3 emissions by using lower carbon catchment and nature-based solutions wherever beneficial to do so. We will also improve the definition and measurement of our scope 3 emissions – at least 90% of our suppliers will report their scope 1 and scope 2 emissions to us by 2025. However, new carbon intensive investments are nevertheless required to address storm overflow discharges and other environmental issues that will increase our emissions in the near term.

Making sure our investments are ‘no regret’

We also need to make sure that the investments we take forward in 2025-30 are ‘no regrets’ under an adaptive planning approach. By this we mean low risk, high value investments that are worthwhile and justified under any likely future scenario. We must not waste customers money by investing in things that later, for example due to growth or climate change being different from what we expected, are no longer required. But we also need to take sensible action now to make sure that we are prepared for the future.



For each of the investment areas in our LTS the table below summarises some of the key challenges and highlights the ‘no regret’ investments needed during 2025-30 that are reflected as ‘enhancement’ cases in our Business Plan and why.




Our plan proposes ‘Price Control Deliverables’ (PCDs) for all of our major investments, these PCDs will make sure that customers are protected should we not deliver the investment or deliver it late. In these instances we will incur a fine or have to return funding to customers which will lower bills in the future.

41 2022 People Panels #4a and #4b and 2023, Long-Term Delivery Strategy – Young People Panel and Innovation Festival

42 2023, Customer valuations for service improvements

Table 3: Our investment areas for 2025-30

Investment areas	The challenges	Customer and environmental benefits	Case number
<div><div><div>Water resources</div><div>c.£530m to reduce leakage, roll out smart meters, promote behaviour change and invest in new supplies</div></div><div></div></div>	<ul style="list-style-type: none">Essex and Suffolk are seriously water stressed areas, driven by climate change, sustainability legislation and increasing demand for water.We already have a temporary suspension on new commercial water requests in Suffolk.Environmental legislation is changing, and standards are increasing.Investment is needed to improve on our already leading leakage position in Essex and Suffolk.	<ul style="list-style-type: none">Reducing demand means we won't have to take so much water from the environment, or treat as much water, which will reduce the amount of energy and chemicals we use too.Customers can reduce their water use (and usually their bills too) thanks to our water efficiency advice campaigns and smart meters (these will be compulsory in Essex and Suffolk).Customers would have enough water supplies to meet forecasted demand over the next 25 years and beyond, even in the most extreme of droughts.We work hard to provide the best balance between protecting the natural environment and securing water supplies for the future, while maintaining affordable bills for customers.Customers consistently receive drinking water that is clean, clear and tastes good.Leakage reductions in line with long-term targets.	<ul style="list-style-type: none">Demand management [NES15, NES36]Water supply investments [NES14]RWD (geosmin) [NES21]
<div><div><div>Environment</div><div>c.£1.7bn to reduce sewer overflow (SO) spills and meet strict environmental targets</div></div><div></div></div>	<ul style="list-style-type: none">The Water Industry National Environment Programme (WINEP) sets out the requirements we need to meet over the next five-year period and is prescribed by the Environment Agency (EA).We need to upgrade five wastewater treatment works and provide extra monitoring at six more, to cope with growing demand.We need sludge storage until the EA farming rules for water strategy is complete.We need to reduce wastewater spills.To eliminate the impact of our operations we need to get better at monitoring and improving river water quality.	<ul style="list-style-type: none">Long-term improvements to river water and bathing water quality, reducing pollution incidents, enhancing biodiversity and reducing flooding.Catchment and nature-based solutions deliver cost-effective, sustainable solutions for the environment and protect biodiversity.Improvements at wastewater treatment works will enable growth in our region, allowing our wastewater system to cope with new major development and help protect local rivers and seas.Improved resilience to the supply chain of sludge to agricultural land.A reduction in SO spills. This is informed by our DWMP which has been tested against different future scenarios.	<ul style="list-style-type: none">WINEP programme [NES17, NES18, NES19, NES28, NES29, NES30, NES31, NES13, NES39]Storm overflows [NES27]Growth at WWTWs [NES26]First-time sewerage [NES33]WINEP Bioresources [NES34]Pollutions [NES37]

Investment areas	The challenges		Customer and environmental benefits	Case number
<div>Resilience</div> <div>c.£400m to safeguard our network and invest in our assets in the future, especially those deemed too critical to fail</div>		<ul style="list-style-type: none">Long-term targets in relation to asset health and service resilience.Extreme weather events and becoming more frequent severe.Climate change.Need to improve security at Critical National Infrastructure sites.	<ul style="list-style-type: none">Customers will get greater protection against the risk of flooding and loss of service.Reduced risk of climate change weather related impacts to service.Critical infrastructure will be properly maintained, in good condition, performing effectively and safely.Lower risk of security and cyber	<ul style="list-style-type: none">Flooding and power resilience [NES32]Asset health [NES35]CCR process enhancements [NES24]Security and cyber security [NES23]
<div>Net zero</div> <div>Continue to reduce our emissions through operational changes</div>		<ul style="list-style-type: none">Long-term targets to become net zero on all emissions by 2050.	<ul style="list-style-type: none">Helping to significantly reduce the amount of harmful emissions that contribute to global warming.We are already ranked as the second-best for water and fifth for wastewater in relation to market-based emissions and have taken significant steps to date to reduce emissions.Our programme of continued investment includes renewable opportunities across our estate, taking steps to decarbonise our fleet, exploring innovations to reduce process emissions and working to improve measurement and reporting of scope 3 emissions.All our enhancement cases take greenhouse gas emissions into account through the options assessment process.	<ul style="list-style-type: none">We are funding this improvement from our base funding allowances and greenhouse gas emissions performance commitments and are not seeking further enhancement funding in 2025-30
<div>Lead</div> <div>c.£47m to increase lead pipe removal schemes</div>		<ul style="list-style-type: none">Long-term targets to remove lead pipes by 2050.	<ul style="list-style-type: none">Reduced risk of harm from lead pipes.Customers strongly support the removal of lead pipes but the rate of removal is still below what will be needed to meet our 2050 target and we will need to go further in future periods to catch-up. Customers did not support a larger programme given the current cost of living pressures.	<ul style="list-style-type: none">Lead replacement case [NES20]

Our performance commitments

Our key service level targets

We have adopted the ‘common’ PCs that Ofwat has identified in its methodology for our plan. Table 4 sets out for each target:

- How important the service area was for customers based on triangulated research evidence
- Where we expect to be in 2024/25 and the improvements we are forecasting for 2029/30
- Where we expect this to place us in comparison to the rest of the sector based on the historical information where this exists.

We have also proposed to adopt Ofwat’s central incentive rates.

Wider measures of performance

We do not propose any further ‘bespoke’ PCs with financial incentives as none of these met Ofwat’s criteria. However, we will continue to set reputational incentives for some existing bespoke PCs and increase our service offering and commitments to customers in relation to repeat sewer flooding.

We currently measure our performance internally through a ‘balanced scorecard’ of 47 different metrics which go much wider than those Ofwat has proposed. We will continue to do that and report our performance on a range of other metrics reputationally.

Table 4: Our performance commitments - base and enhancement

Measure		Cust. priority	2024/25 forecast	2025/26	2026/27	2027/28	2028/29	2029/30	Est. comparative
Compliance Risk Index (CRI), a measure of drinking water quality		High	4.35	0	0	0	0	0	Max compliance
Water quality contacts	Per 1,000 of the population	High	1.10	1.06	0.98	0.98	0.97	0.94	Average
Interruptions to supply over three hours	hh:mm:ss	Medium	00:05:00	00:04:51	00:04:39	00:04:27	00:04:15	00:04:03	Upper quartile
Mains repairs	Per 10,000km	Medium	123.40	123.40	123.40	123.40	123.40	123.40	Above average
Leakage NW	% reduction from 2019/20 (3 yr avg)	High	13.0	14.5	16.4	17.8	19.2	20.5	Close to Upper quartile
Leakage ESW	% reduction from 2019/20 (3 yr avg)	High	15.4	16.7	18.4	19.2	20.0	20.8	Close to frontier
Unplanned outage	Score	Medium	4.41	4.31	4.23	3.82	3.76	3.69	Lower quartile
Per capita consumption (water use)	% reduction from 2019/20 (3 yr avg)	Low	-0.6	1.6	3.9	6.2	8.1	9.7	Average
Business use	% reduction from 2019/20 (3 yr avg)	Low	1.3	-4.7	-11.6	-16.8	-20.1	-22.3	n/a
Internal sewer flooding	Per 10,000 connections	High	1.23	1.22	1.20	1.20	1.19	1.17	Upper quartile
External sewer flooding	Per 10,000 connections	High	21.43	20.28	19.18	18.14	17.16	16.25	Upper quartile
Pollutions (all)	Per 10,000km of wastewater network	High	19.32	18.98	17.65	16.32	14.65	13.32	Frontier
Serious pollutions	Number of	High	0	0	0	0	0	0	Max compliance
Sewer collapses	Per 1,000km	Medium	8.12	7.92	7.71	7.50	7.3	7.12	Average
Discharge compliance	%	Medium	99	100	100	100	100	100	Max compliance
Storm overflows	Ave number	Medium	20.00	19.53	18.80	18.07	17.34	16.61	Above average ⁴³
Bathing water quality	%	Low	80.1	80.1	80.1	81.1	82.1	87.1	Average
River water quality	P load reduction (%)	Low	3.13	4.93	5.11	7.45	7.49	7.52	n/a
Biodiversity	Biodiversity units per 100km²	Medium	0	0	0	0	0.08	0.25	n/a
Greenhouse gas emissions (water)	Tonnes CO ₂ e	Low	118,072.22	113,920.09	112,697.76	110,335.75	108,345.00	106,711.73	n/a
Greenhouse gas emissions (wastewater)	Tonnes CO ₂ e	Low	132,671.82	108,011.16	105,978.44	104,719.03	103,203.91	101,226.38	n/a

43 We are one of three companies seeking to reduce average spills to 20 by 2025 without additional funding from customers. There are just three years data to forecast performance but we forecast to place in the top half of the sector.

