

REGULATING FOR THE LONG-TERM

There is an urgent need for water regulation to take a longer-term approach than it has in the past. The industry has argued this for some time, and as the implications of environmental crises and changing societal expectations have become plain, policy-makers and regulators have come to agree. Hence we see clear long-term objectives in both Defra's new Strategic Policy Statement for Ofwat, and Ofwat's own approach to PR24.

There's no time to lose in making an effective switch to long-term regulation. Ofwat has a new leadership team, and incoming chair Iain Coucher has already identified that he is targeting a legacy based on building a reliable, resilient water industry that can support society for decades to come. According to the Environmental Audit Committee, Ofwat has ground to make up. Its inquiry into Water quality in rivers was littered with witnesses arguing long-term investment has suffered

at the hand of keeping bills down in the short-term. One of the EAC's recommendations was "that Ofwat prioritise the long-term investment in wastewater assets as an essential outcome of its price review process".

In this context, and ahead of the publication of the draft methodology for PR24, Northumbrian Water Group (NWG) – which incorporates Northumbrian Water and Essex & Suffolk Water – has produced a suite of papers which hammer home the need for regulation to adopt a long-term view. On the core issues of financing, asset health and the Net Zero transition, NWG argues regulation needs to do more, both at PR24 and beyond, to support the delivery of long-term goals. A complementary piece on customer engagement discusses how to ensure customers are kept at the heart of long-term outcomes.

NWG's thought leadership on long-term regulation is summarised in this paper. See p4 for how to access the full suite of information.

PART 1: THE NEED FOR LONG-TERM FINANCING

Supporting long-term investment

Emerging statutory targets on Net Zero, storm overflows, water demand and nutrient reduction are bringing to life the new long-term approach to water policy.

In a new paper, *Supporting long-term investment*, NWG says this trend is hugely welcome, but the industry's financing arrangements need to match.

It warns that in sharp contrast to this new policy, the regulatory approach to risk and return at recent price controls has favoured short-term outcomes and spot market rates. Risk has been increasing materially over time, while allowed returns have suffered step-change reductions.

Deteriorating appeal

Falling returns fit the populist narrative that 'greedy' shareholders need to be kept in their place. But the paper illustrates the problems that would ensue for everyone, should investors be put off the sector, or should short-termism persist.

Long-term private investment in water is needed in spades. Check out the following price tags: £21bn for water resources (National Infrastructure Commission, NIC), £54bn for storm overflows (Defra), and £2-4bn for Net Zero (Water UK). NWG calculates that total investment since privatisation could need to double.

Should the sector fail to attract that invest-

ment, or should the cost of that investment spiral up, the negative consequences could include service interruptions, environmental damage and piling costs onto future generations.

The backdrop against which this is taking place is far from benign. There is serious macroeconomic uncertainty and international, cross-sector competition for long-term capital. While water has traditionally been a safe haven for steady returns, some characteristics of the sector today make securing investment more challenging. For instance, operational risks have risen on the back of stretching targets, exacerbated by a cost/service disconnect and extreme weather events. NWG concludes that a significant uplift in investment in this uncertain context might be challenging to achieve without greater stability and predictability in how the rate of return is set.

Outlook for returns

Regulation could support investment, even in this tough environment, if it took a stable and predictable approach and focused on long-term outcomes across allowed returns and risk allocation. However, according to the paper, this has not been the case in the past and under early showings, will not be the case at PR24. NWG highlights in particular:

- Most of the movement in the allowed return across PR14 and PR19 was driven by changes to the methodology applied to estimate each of the parameters in setting the cost of equity rather than market driven changes.
- The nature of the changes has driven a great-

er focus on spot market information. If pursued, this will result in customers bearing higher costs than they would under a longer-term approach.

- The methodology-based fall in allowed returns has been accompanied by increasing risk exposure over time, which has reduced firms' financial headroom and ability to cope with shocks.
- For PR24, Ofwat is proposing to use methodologies that were explicitly rejected by the Competition and Markets Authority (CMA), are downside skewed, and which, if adopted, would reduce the cost of equity irrespective of movements in the market rates (which are expected to increase materially ahead of PR24).

Recommendations

NWG advocates a four-pillar framework to address these issues and secure essential, long-term investment in water. This comprises:

- Developing a clear and consistent methodology to set allowed returns that can be applied over multiple price reviews. This methodology should follow the precedent set by the CMA at PR19. The clear risk, should this not happen, is a swift trip back to the CMA to appeal PR24.
- Using long-term information to calculate allowed returns.
- Deploying a wide range of evidence to cross-check the level of allowed return, rather than Ofwat's proposed singular focus on short-term Market-to-Asset Ratio evidence.
- Setting the overall package of risk and return in the price control with due consideration of risks at a company level.

LONG-TERM PRIVATE
INVESTMENT IN WATER IS
NEEDED IN SPADES.

PART 2: THE NEED FOR LONG-TERM
ASSET HEALTH p2 ►

Resilient essential services require healthy assets

In line with Ofwat’s stated PR24 objective of companies taking a long-term approach, the water industry urgently needs a consistent, robust and independently verified way to assess the health of its assets. And in all probability, Ofwat will need to incorporate a forward looking element into its approach to assessing base costs at future price reviews.

Those are among the conclusions of NWG’s new thought leadership paper on asset health. *Resilient essential services require healthy assets* finds “reasonable evidence” that the industry may be structurally under-investing in the maintenance of the water and wastewater asset base and, unsurprisingly, that we really need to do something about it.

There is a lot at stake. Public health and the health of the environment could suffer catastrophically should equipment fail, potentially with associated economic and societal impacts. For their part, water companies have legal obligations to honour, as well as a responsibility to their customers who pay (around a quarter of their bill) for assets to be well maintained and eventually replaced, and who prioritise resilient services.

Underfunding or bad management?

The paper finds fundamental problems with the current regulatory framework’s reliance on historic costs to set future levels of expenditure. At PR19, the regulator applied econometric modelling to eight years of totex data from each company to establish an ‘efficient’ totex for the coming five. This was set at the level of the most ‘efficient’ companies – those who had spent the least – but taking account of differences between firms, such as scale and geography served.

Not only does this assume historical allowances were set at the right level, but if the benchmark companies had been in a capital

maintenance trough, it could result in insufficient allowances being granted to the wider industry. On top of that, the paper points out that the climate and nature emergencies, together with rising service expectations, are imposing new demands on often very old assets, driving a need for material replacement. The Net Zero transition and the sector’s pledge to halve leakage by 2050 are good illustrations.

In short, NWG suggests that sooner or later, additional investment will be needed to stabilise risk. It applies some interesting analysis to its own data, using a model developed by WICS – essentially a bottom up assessment of the condition and age of company assets of different classes, against an engineering view of asset lives and required replacement rates, comparing that against historic investment levels by asset class. As the table shows this revealed NWG to be spending only around a third (£65m a year) of the long-term requirement identified (a low of £174m).

NWG doesn’t duck the obvious push back questions: if allowances are insufficient, why do companies sometimes underspend them, and are water companies just poor asset managers? On the former, the paper suggests underspending is not something that has been taking place in capital maintenance, with the industry as a whole actually significantly overspending in AMP6. On the latter, the short answer is, nobody really has a clear idea. There is no commonly established system across the sector for assessing asset health.

Long-term solutions

NWG identifies three major recommendations to address this situation over the long-term.

The first is to build a common framework for consistently assessing asset health. This would help reveal the truth regarding structural under-

investment versus inefficient management. The company seems to be pushing at an open door here: Ofwat is already pioneering an Asset Management Maturity Assessment (AMMA), which will provide valuable information about how capable companies are; it has also, in a discussion document on operational resilience, proposed a long-term plan to establish a framework to assess and report on asset health consistently.

Second, NWL goes a step further in suggesting an independent expert third party be engaged to assess asset health and management across the sector under the common framework – potentially the NIC. This is in view of the detailed and technical nature of the work, and the trust that could be derived from independent assurance. The paper astutely points out that this would be “comparable to the role undertaken by the independent rating agencies on financial resilience”.

Finally, NWL argues that for PR29 and beyond Ofwat should explore changing how it assesses base costs, both to incorporate a forward-looking element into the modelling, and to better reflect differences in asset health across the sector. The CMA at PR19 indicated support for triangulating historic data with forecasts. Ofwat responded in its December 2021 *Assessing base costs at PR24* consultation, saying it was “open but cautious” towards such an idea. If a common framework could be established, forward-looking estimates could gain credibility.

PR24 actions

While these longer-term actions are worked through, NWL recommends the following for PR24:

- Ofwat should allow companies to make investment cases, similar to enhancement cases at the last price review, for additional investment in capital maintenance or asset replacement where there is a clear need that cannot be funded from the existing base cost allowances. Companies should demonstrate: particular assets are at risk of failure and the consequences; options have been assessed and why the preferred option is chosen; that proposed costs are efficient; they have customer support; and appropriate assurance.
- Companies should demonstrate effective management of their asset bases, with the AMMA framework used alongside existing external assurance frameworks such as the ISO55001.
- Customers should be protected. Ofwat could use existing regulatory mechanisms such as clawback arrangements or Price Control Deliverables to ensure companies deliver the required investment, and cost sharing incentives to prevent underspending. Affordability support could be delivered through company schemes and the proposed national social tariff.

RESULTS FROM NWG’S APPLICATION OF WICS METHODOLOGY						
	Value	Life expectancy (years)		Replacement rate (£m / year)		Current annual spend
	£m	Low	High	Low	High	£m/year
Total (excl. long life assets)	13,249	56	76	173.9	236.6	65

OFWAT SHOULD EXPLORE CHANGING HOW IT ASSESSES BASE COSTS, BOTH TO INCORPORATE A FORWARD-LOOKING ELEMENT INTO THE MODELLING, AND TO BETTER REFLECT DIFFERENCES IN ASSET HEALTH ACROSS THE SECTOR

PART 3: THE NEED TO SUPPORT THE NET ZERO TRANSITION p3 ➤

Completing emission possible

The water sector is in the process of changing the way it thinks, plans and acts to deliver the globally important long-term outcome of Net Zero greenhouse gas (GHG) emissions.

Recognising its responsibility for almost a third of UK industrial and waste process GHG emissions and 1% of total UK GHG, the sector has taken a leadership position and pledged Net Zero operational emissions by 2030. NWG has been even more ambitious, committing to this goal by 2027. Abating operational emissions is the sector's first step on the journey to full Net Zero by 2050 across all aspects of its business and supply chain, in line with the national ambition.

On this journey, companies will need to make choices, balancing the cost of each abatement option against its effectiveness in reducing emissions and its scalability. The most efficient path will be to focus on interventions with a low marginal cost of abatement and move on to higher cost abatement activities when lower cost options have been exhausted.

Regulatory principles and practice

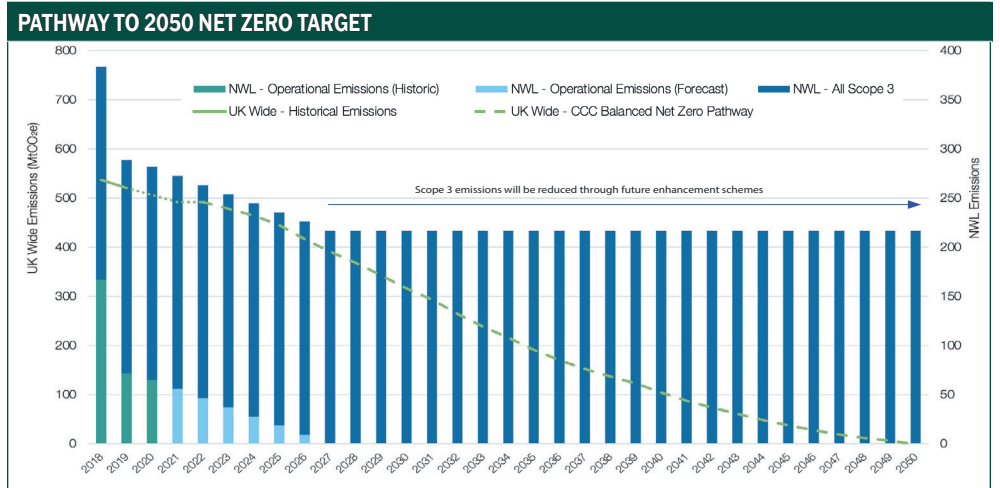
In its *Completing emission possible* thought leadership paper, NWG points out regulation will also need to adapt to accommodate and support progress towards a Net Zero water sector. Ofwat set out three principles in its January 2022 Net zero principles position paper. While welcoming the steer, NWG provides the following challenges:

Ofwat: Company Net Zero plans should be clearly linked to national government targets.

NWG: Delivering the long-term 2050 goal requires action now – we must not kick the Net Zero can down the road.

Ofwat: Company actions on Net Zero should encompass both operational and embedded emissions.

NWG: Operational emissions reduction should be the near-term focus, supported by improving the measurement of embedded emissions. Ofwat's plan to standardise the reporting of embedded emissions by 2022-23 is not feasible, cost beneficial or in customers' interests. It will take time and innovation to develop a robust Scope 3 emissions methodology and reduction plan, given limited transparency of supply chain data. Applying an economic incentive to Scope 3 emissions at PR24 would not be efficient or a good use of bill-payers' money. Instead, efforts in 2025-30 should focus on



Source: Northumbrian Water Limited analysis. Note: the UK wide forward trajectory is from the Sixth Carbon Budget. The government's 2050 Net Zero target is based on reductions in emissions from 1990 levels to 2050, but industry level and company level data on emissions in 1990 are not available.

maturing our ability to precisely measure these emissions; there is not yet a robust approach or set of tools for doing so.

Ofwat: Companies should prioritise the elimination and reduction of GHG emissions before the use of offsets.

NWG: In principle, this is well-established thinking, but there are caveats. Offsets are likely to be needed to compensate for process emissions from wastewater treatment which are difficult to avoid or reduce. They could also be useful in keeping bills down against the backdrop of competing spend priorities, rising inflation and a cost of living crisis. Remember offsets will only be used by companies where they are cheaper than taking action directly; if they are robust then this simply ensures that the most efficient approach is taken to emissions reduction. The key consideration should be ensuring offsets actually compensate for the emissions stated, and in that, not all offsets are equal.

Priority actions for PR24

NWG calls on Ofwat to deliver a series of actions in the next price round to support the sector on its Net Zero journey:

- Standardise the measurement of operational emissions in line with the latest Carbon Accounting Workbook and set a baseline for each company to reach Net Zero operational emissions by 2030 that reflects its previous progress. This avoids a repeat of some of the challenges seen on leakage at PR19 where a single percentage reduction target was set for all which effectively rewarded poor comparative performance.

- Collaborate widely and fund the industry to improve the measurement of Scope 3 emissions, so trustworthy targets can be set in future. This should initially focus on enhancement schemes where there are material and measurable Scope 3 emissions that water companies can influence.

- Set base cost allowances to recognise the efficient additional costs of delivering a lower baseline of operational emissions, as would happen with any existing level of service, given companies have delivered varying levels of reductions through existing base cost allowances to date. Firms that are ahead will have picked the low hanging fruit already, meaning interventions with higher abatement costs will be needed.

- All companies could be assumed to be able to achieve a given level of operational emissions without any additional funding. Deeper, more costly cuts will need to be funded. Customers could be protected using a common Performance Commitment with a financial Outcome Delivery Incentive (ODI). This could have a rising rate, where greater emissions reductions result in bigger incentives. NWG suggested maximum rewards could be "double locked" by setting the ODI rate at the lowest of either the non-traded price or the traded price of carbon.

- Companies should also be encouraged to make enhancement investment cases for GHG reduction projects. The cost of these could be socialised across all customers via a GHG emissions reduction fund, akin to Ofwat's innovation fund, and so the most efficient GHG emissions reductions schemes across the sector would be progressed.

- Ofwat should support the use of appropriate offsets by providing guidance on this and monitoring their use.

OPERATIONAL EMISSIONS REDUCTION SHOULD BE THE NEAR-TERM FOCUS, SUPPORTED BY IMPROVING THE MEASUREMENT OF EMBEDDED EMISSIONS.

PART 4: THE NEED FOR LONG-TERM CUSTOMER INVOLVEMENT p4 ►

Customer engagement for PR24 and beyond

Customer engagement in water is at a crossroads. Brakes have been put on the progress made over successive price reviews, creating uncertainty around how engagement, insight and customer research ought to be deployed to support business planning.

This has been driven by two developments. First, engagement landscapes have evolved as societal priorities have shifted and uncertainties increased, requiring new types of conversations to be had with customers. Second, Ofwat has decided to centralise research at PR24 and cease the mandate for Customer Challenge Groups (CCGs). This could have undesired and unintended consequences, including diluting water company ownership of the customer relationship, distancing customers and communities from price control priorities, and reducing transparency around how customer evidence influences decisions.

These are among the findings of a thorough review of customer engagement conducted by ICS Consulting for NWG. *Customer engagement for PR24 and beyond* seeks to identify what worked well for PR19, what should continue, and what could have been done better. This was undertaken to support NWG's core policy of putting customers at the heart of everything it does.

Engagement framework

Based on the findings of its research, ICS proposes an engagement framework for PR24, to offer some direction at the crossroads. This recognises that engagement needs to work within the emerging regulatory rules, but seeks to preserve and expand opportunities for local customers to have a substantive say. It also seeks to demonstrate the link between customer engagement activities and business planning processes, set in the context of long-term delivery.

The framework sets out five steps to incorporate engagement into business planning and delivery (see box). ICS finds the role of articulating the customer voice is multi-layered and shared across a number of organisations and stakeholders. A customer evidenced plan will need to evolve by building

Five step customer engagement framework

- 1 Understand purpose and priorities to determine the company's long-term vision and direction, to feed into the Long-Term Delivery Strategy.
- 2 Co-create future paths to deliver the long-term vision, to feed into adaptive planning.
- 3 Value and appraise customer evidence for investment plans, to feed into best value business planning for the coming five years.
- 4 Test, challenge and refine plans, to ensure they align with customer views on price and service.
- 5 Monitor delivery to ensure best value services are being provided.

each step on the one before it, accounting for multiple feedbacks between the steps, and incorporating ongoing engagement activities across the full timeline.

Wider recommendations

As well as identifying this fundamental engagement framework, ICS offers recommendations on a host of other relevant issues, including:

- Continuous engagement – customer engagement should be designed to be continuous rather than periodic or one-off.
- Company-led research – despite the centralised research approach, there remains a need for companies to carry out their own valuation activities to provide the full set of customer evidence for overall plan development and balancing.
- CCGs – retaining a role for a CCG-type body at PR24 is vital. These groups should evolve to challenge and scrutinise delivery as well as business planning. Previous CCG arrangements should be strengthened to mitigate perceptions of capture. Potential methods might include
 - › enhanced governance to demonstrate distance from the company, perhaps with development of an industry good governance code
 - › enhanced capabilities and information – for example, via expert sub groups and external advisors
 - › enhanced representation to ensure that challenge comes from a representative body of customers as well as relevant local and/or national stakeholders.

NWG engagement policy

NWG says it intends to follow the ICS engagement framework and proposals. It will triangulate the results of the centralised research with other evidence, and continue with its CCGs. NWG plans to align the groups with CCW's proposals around the creation of a central oversight group; strengthen independence through additional recruitment; and provide resources to enable members to better challenge plans.

More generally, NWG will enthusiastically continue to engage with customers on topics where they can give meaningful views, which for PR24 will include long-term direction. It has created People Panels for this purpose – regional representative groups comprising current and future customers. Panel members will be asked to contribute on long-term ambition, service levels and affordability, as well as the strategy and rationale for the plan including trigger points for different investment solutions. NWG will use a deliberative model and triangulate the findings.

FURTHER READING AND DISCUSSION

NWG is committed to the pursuit of effective, long-term regulation.

Its four thought leadership papers

- *Regulating for the long-term: supporting long-term investment*
- *Regulating for the long-term: resilient essential services require healthy assets*
- *Regulating for the long-term: completing emission possible*
- *Customer engagement for PR24 and beyond are available to download at <https://www.nwg.co.uk/regulating-for-the-long-term> and the authors welcome feedback and engagement via haveyoursay@nwl.co.uk*

An event will be held in the autumn for stakeholders to discuss the ideas, themes and recommendations captured in the papers, as well as other aspects of regulating for the long-term. More details on this will be circulated in due course.

RETAINING A ROLE FOR A CCG-TYPE BODY AT PR24 IS VITAL.