

UUWR_53

PR24 Draft Determination: UUW Representation

Area of representation: Outcomes - Operational Greenhouse Gas Performance Commitments for Water and Wastewater

August 2024

This document outlines our representation in response to Ofwat's draft determination related to the common performance commitments for operational greenhouse gas for water and wastewater

Reference to draft determination documents:

Ofwat's regulatory framework and net zero, page 12

PR24-DD-PCM_Operational-greenhouse-gas-emissions-wastewater

PR24-DD-PCM_Operational-greenhouse-gas-emissions-water

Overview of UU's DD, page 8

PR24 operational greenhouse gas emissions performance commitment (Water)

PR24 operational greenhouse gas emissions performance commitment (Wastewater)

1. Key points

- **We don't believe the methodology underpinning Ofwat's GHG performance commitment is correct:** As we have previously stated in our business plan submission document UUW37, Ofwat's methodology is not in line with internationally accepted carbon accounting approaches. As a result, we do not agree with Ofwat's assessment of UW's ambition.
- **The baseline year chosen for the PCL prohibits a fair and comparable performance commitment across the sector:** We suggest Ofwat should update baselines to be consistent across the sector and across water and wastewater. We suggest a baseline of 2024/25 forecast should be used.
- **Ofwat's proposed PCLs for Operational GHG should be updated in line with our robust and assured forecasts, inclusive of AMP7 WINEP:** Ofwat's PCLs do not include AMP7 WINEP becoming operational, FY24 actual data, improved granularity on chemical consumption, benefits from unfunded net zero enhancements and scope changes resulting from draft determination. We have provided a suggested PCL which reflects all of these changes.
- **The net zero base uplift of £7m is not sufficient to support the associated 2.5% stretch:** Heat and fleet emissions make up less than 8% of our PCL, meaning a third of these emissions would need to be cut to achieve the 2.5% reduction applied. We have made a representation on our net zero enhancement cases, as we believe that enhancement expenditure is the appropriate classification for investment to meet the net zero obligation.
- **The suggested cap and collar for the GHG PC is ineffective and does not sufficiently protect customers or United Utilities from unforeseen external events:** We encourage Ofwat to re-evaluate this.

2. UW's PR24 proposal

Using Ofwat's methodology for the common GHG PCs, our October 2023 plan showed a 12.37% decrease in water and 10.66% increase in wastewater operational emissions in 2029/30 from a 2021/22 baseline. This included an additional stretch of a further 1% reduction from our planned delivery profile to recognise our ambition to maintain emissions reduction despite the challenge of increasing use of electricity, fuels and chemicals to achieve the extensive new legal requirements for further improvements to the water environment. This includes Environment Act targets, phosphorus drivers to improve water quality, an extensive overflow activation reduction programme and changing regulatory incentives.

3. Draft determination position

Following draft determination, the following conclusions were reached by Ofwat relating to the Water and Wastewater PCLs:

- Ofwat provided additional stretch on top of an already stretching PCL for both water and wastewater PCs.
- Ofwat rejected the Net Zero enhancement suggestions but did not remove the associated emissions reductions from UW's PCLs.
- Ofwat has not included the impact of AMP7 WINEP becoming operational in its baseline as it is using 2022/23 as the baseline year.
- Ofwat has included an additional stretch of 2.5% on the PCL related to a £7m base cost adjustment for fleet and heat.
- Ofwat has suggested a cap and collar based on 0.5% of RoRE, which would lead to a cap and collar of c.£160m.

4. Issues and implications

4.1 PC calculation methodology

Using Ofwat's methodology for the common PCs, our submitted plan shows a reduction in operational greenhouse gas emissions of 12.37% for water services and -10.66% (i.e. 10.66% increase) for wastewater services in 2029/30 from a 2021/22 baseline. However, as stated in our Strategy to Net Zero "Ofwat's methodology for these PCs is different to our standard reporting approach that aligns to international best practice, for example it uses static emissions factors to avoid reporting changes associated with GHG accounting updates."

In contrast to the PC methodology, using our standard reporting approach with forecast Government emissions factors, we forecast a 29% reduction in emissions by 2029/30. We consider that this methodology better demonstrates that we are on the glidepath to meeting the Government's Net Zero ambition. If we had used the widely accepted standard reporting methodology, using forecast Government emissions factors and 6th CCC budget trajectory on UK-wide decarbonisation, our plan would be considered ambitious.

In the PC definition Ofwat has fixed the emission factors, used location based for scope 2 emissions, and continued to use a population basis for the calculation of process emissions. These elements reduce the impact that business decisions to support decarbonisation can have, such as purchasing renewable electricity, as the emissions factor has been defined as that of the UK grid in the chosen year of 2022. Similarly, emissions reductions cannot be achieved by using innovative lower emissions chemicals or fuels as these are not part of the defined methodology. Finally, as wastewater nitrous oxide process emissions are reported based on population, this means that in an area such as the North West of England where the population is forecast to grow in AMP8, it would not be possible to demonstrate a reduction in emissions, as they are directly linked to population growth and not to United Utilities actual emissions. This point is expanded in DD representation document [UUWR 30 Carbon Net Zero Enhancements](#), highlighting the need for the process emissions net zero enhancement.

We propose that the emission factors used to calculate chemicals are updated to align with the Water Industry Chemicals and GHG Task and Finish Group output. This is composed of the most up to date emission factors for chemicals and therefore would demonstrate a more representative figure for our total GHG emissions.

Ofwat recognises the importance of greening the grid in their regulatory framework, stating that it is "supporting companies to go further and faster", which includes "direct purchases of renewable energy" and "renewables only contracts" (Ofwat's regulatory framework and net zero, page 12). Despite this, the proposed PC methodology does not account for the carbon benefit of either of these decarbonisation activities.

Ofwat's methodology in setting the PCL refers to meeting Government targets. These targets include reductions from other industries (the grid and chemical industry decarbonising) which the common operational GHG emissions methodology does not account for, as noted above.

In addition, it should be noted that emissions reductions from business decisions can only be achieved once. Therefore, companies that are more mature in their GHG management have already realised many cost-effective opportunities. It is not possible or fair to normalise for opportunities to decarbonise base expenditure between companies at different levels of maturity as attempted in "Performance from base between 2024-25 and 2029-30 decisions Test (iii) (PR24-DD-PCM_Operational-greenhouse-gas-emissions-wastewater and water)". For example, a company who already invested in advanced anaerobic digestion will have lower emissions associated with processing and disposal of sludge and additional investment cannot further reduce the emissions from the same sludge. This means setting stretch based on distribution of the forecasted change in GHG emissions over AMP8 penalises companies who have already invested in previous AMPs.

4.2 Ofwat's approach to baseline setting is inconsistent and does not treat companies equally

We believe that the approach to setting baselines will lead to unequal opportunities for different companies to meet performance expectations. Baselines have been set inconsistently across the industry. Some are set from 24/25 forecast data (e.g. UW's water performance commitment) and others are set based on 22/23 actuals (e.g. UW's wastewater performance commitment). This does not allow companies to show the emissions impact of their already funded AMP7 WINEP programmes becoming operational. The performance commitment definition document states that baselines should be set from 24/25. However, this is inconsistent with data presented in setting the PCLs.

The methodology used for setting the PCL follows a series of tests to determine how efficient each company is in setting their PCL. This has resulted in further stretch applied, with varying percentage reductions applied over the AMP for different companies.

For UW's wastewater PCL, Ofwat has used the baseline year 22/23 instead of 24/25 as lower of the two years was used. Based on the January submission, this baseline year of 22/23 is 8.85% lower than 24/25 baseline year, meaning a further stretch of 8.85% has been applied to the starting point. This approach neglects to account for emissions from AMP7 activities already funded to meet environmental drivers.

For the water PCL, Ofwat has used the preferred 24/25 baseline year, but an additional stretch of 4.68% over the AMP has been applied.

When looking at the year 23/24, validated actual emissions are now available for both water and wastewater, and UW have seen a 5% increase in emissions compared to 22/23 levels. This is greater than the 1% increase that was forecast for this same time period, in the January submission. This can mostly be attributed to increases in chemical usage for both water and wastewater processes, resulting from better methodologies to collect chemicals data and meaning more chemical use has been recorded. In addition, increases in chemical demand to meet permit conditions and a greater number of projects becoming active has also driven emissions increases between 22/23 and 23/24. This actual data feeds future forecasts and shows emissions forecast for 24/25 are 10% greater than Ofwat's proposed 22/23 baseline year. This actual data further demonstrates that a baseline year of 22/23 is not efficient, or fair, as it neglects to factor in the impacts of such changes.

4.3 Impacts of WINEP

United Utilities has one of the largest WINEPs in the industry. Our wastewater enhancement programme is the largest across all companies, accounting for 25% of WINEP enhancement business plan expenditure across 11 companies by cost.

The scale of our WINEP and the challenges in meeting such an ambitious plan should be considered when assessing our carbon emissions. The WINEP enhancement programme is necessary to meet the requirements of the Environment Act, over which we have limited control. Therefore, the scale of our WINEP, especially in comparison to those of others in the industry, should be considered when determining the ambition of our net zero carbon proposals.

The forecasted GHG emissions are directly proportional to the water and wastewater operational activities to meet WINEP, in addition to other service and environmental drivers. They are not influenced by the efficiency with which those services will be delivered, and if emissions forecasts are deteriorating it is because of the impact of meeting increasing regulatory and legislative drivers. Base and standard enhancement often leads to increased GHG emissions and efforts to mitigate operational emissions increases are often more expensive.

4.4 UU's ambitious net zero carbon emissions targets

We were disappointed to understand Ofwat has deemed United Utilities' enhancement expenditure proposals for net zero carbon emissions as "moderately ambitious" for water and "unambitious" for wastewater. We disagree with these statements; our proposals reflect the motivations of the company to meet challenging carbon

emission reduction targets, with science-based targets for scope 1 and 2 aligned to a 1.5 degree Celsius pathway. It should also be considered that United Utilities have one of the largest WINEPs in the industry, which drives significant increases in emissions, making reaching targets even more challenging.

UU was the first water company to have our near-term Science Based Targets verified by the Science Based Targets Initiative (SBTi) in July 2021. Our scope 1 and 2 targets are aligned to the 1.5 degree Celsius pathway, which the SBTi consider to be ambitious. Furthermore, we have just set long term targets in line with the Net Zero Standard, which have been approved and have been published by SBTi in August 2024¹.

We have also published a clear transition plan to net zero, outlined in October 2023 business plan document *UUW37 - Our strategy to net zero 2050* following Transition Plan Taskforce guidance. As such, United Utilities is committed to meeting net zero emissions in line with Government targets and ambitions. Our plan includes benefitting from reductions within other industries (grid electricity, chemicals etc.), which is not reflected in the common performance commitment method.

We submitted an ambitious target, including a 1% stretch over the AMP as well as reductions delivered through our standard enhancement programmes. However, overall reductions are not seen due to the AMP7 and AMP8 WINEPs becoming operational.

Ofwat's calculations for the PCL provide additional challenge over and above the already stretching 1% we applied over the AMP. Ofwat states: "we also expect the company to play its part in meeting net zero by 2050, by reducing its operational greenhouse gas emissions by 12% for water services and -2% for wastewater services. We consider these more stretching targets are appropriate to put the company on the glidepath to the Government target of net zero by 2050." (Overview of UU's DD, Page 8). As set out above, United Utilities has independently verified Science Based Targets which put United Utilities on a glide path to the Government target of net zero by 2050, and the PCL targets we put forwards were already aligned to this.

UU has shown ambition to reach net zero, trialling innovative technologies and working with partners to deliver net zero in the region. Some examples include trialling the use of drones to quantify site wide process emissions, trialling the use of graphene green concrete, and working with the Mersey Biochar project hosted on UU's head office location to explore opportunities to decarbonise heat.

4.5 Ineffective RoRE cap and collar for GHG performance commitments

The application of the standard outperformance cap of 0.5% of equity and standard outperformance collar of -0.5% of equity, as defined in Ofwat's Key Dataset 1, is an ineffective approach for the operational greenhouse gas water and wastewater performance commitments. Using the incentive rate proposed by Ofwat of £188/tCO_{2e}, to reach the collar on penalty, emissions would need to increase by 36% each year of the AMP. Historically, UU has seen a maximum fluctuation year on year in our operational emissions of 5% between FY19 to FY24. The current cap and collar is an order of magnitude above this fluctuation and would not protect customers or companies in even the most extreme unforeseen circumstances.

4.6 Implications

The additional stretch and change of baseline year is compounded by not getting any emissions reduction projects in our net zero enhancement (NZE) programme (see DD representation document [UUWR 30 Carbon Net Zero Enhancements](#)).

Actual data for 2023/24 shows an increase in emissions, providing a further challenge to meeting the PCL, as future forecasts are based on this data set.

Updates to the WINEP programme since the January submission include additional projects to be delivered in AMP8 that were not previously included in the GHG forecast.

¹ [Target dashboard - Science Based Targets Initiative](#)

Outcome tables have been updated in line with the representations we are making as a business. If these representations are not accepted, this would change the forecast emissions and new data tables would need to be submitted. This includes, but is not limited to, changes to net zero enhancement acceptance and AMP8 WINEP. One example to note as part of AMP8 WINEP is if Bio P solutions are not accepted, this will result in a substantial increase in consumption of ferric sulphate and sodium hydroxide to meet permit conditions. This in turn will increase greenhouse gas emissions from chemical consumption by up to 49% of the total GHG emissions from chemicals, reported for 2023/24.

Out of the net zero enhancements that we have suggested to be included in our final determination, those that impact the PCL within AMP8 are Transport fossil fuel reductions – green fleet LCVs phase 1 (E00001340) & Transport fossil fuel reductions – green fleet Biomethane HGVs (E00001342). These have been included as part of enhancements within the OUT data tables and therefore form part of our proposed PCL. The others do not impact the PCL in AMP8 but are necessary to achieve future emissions reductions. More information can be found in DD representation document [UUWR_30 Carbon Net Zero Enhancements](#).

5. Approach for final determination

In order to better assess UUW's level of ambition for Net Zero, we suggest Ofwat should:

- Consider inconsistencies with methodologies to ensure that the current limitations are adequately addressed.
- Consider a consistent baseline year which is consistent across all companies and includes the impact of AMP7 WINEP becoming operational.
- Take into account our demanding AMP8 WINEP and constraints associated with it, and the fact that UUW's WINEP programme is much larger than those of other companies.
- Consider ambitions based on what can be achieved and delivered against, and with regard to independently verified Science Based Targets to deliver net zero in line with the Government's target of 2050.

In calculating UUW's PCL for water and wastewater GHG performance commitments, we suggest Ofwat should:

- Use UUW's submitted GHG emissions forecasts and PCLs which appropriately capture:
 - The changes required to the PC calculation methodology as outlined above.
 - A fair and consistent baseline, incorporating 2023/24 actuals data.
 - The operational emissions from AMP7 WINEP schemes which meet regulatory drivers and are fully committed in our AMP7 delivery plans.
 - All changes to totex resulting from draft determination and UUW's representation.
 - The removal of emissions reductions resulting from net zero enhancements which we have accepted, will not be included in our final determination.
 - The inclusion of net zero enhancements discussed in the representation on Carbon Net Zero, UUWR_30, which we believe provide an ambitious £/tCO₂e for customers and the environment.
 - The effect of £7m net zero base cost adjustment.

6. Net zero base cost adjustment, linked to net zero enhancements

We have shared detail on the net zero base cost adjustment in our representation on net zero enhancements ([UUWR_30 Carbon Net Zero Enhancements](#)). The summary of key points from this document are:

We do not believe net zero investment to be base, as the increased need for investment to meet this crucial driver is not built into prior investment, and often conflicts with other investment drivers.

If Ofwat maintain that net zero investment should be base and continue with the base uplift, we do not believe that the £7m allowance suggested is close to the level of investment needed to meet net zero targets.

However, if the £7m allowance remains at final determination, we have a large range of projects which meet the criteria and will select which projects are most efficient on a £ per tCO₂e basis.

See DD representation document [UUWR 30 Carbon Net Zero Enhancements](#) for more information.

7. Reporting and assurance

We note that the approach to reporting and assurance has been changed at Draft Determination and, while we have no objections to the intent of the wording change to promote third party verification, the currently stated version is not possible to achieve.

Current wording: “The company is required to confirm that all data relating to its operational GHG emissions is compliant with an internationally recognised carbon reporting standard (e.g. ISO14064). Data must be assured following an audit by an appropriately qualified independent third-party who is accredited and capable of providing appropriate certification to confirm compliance to the chosen standard.”

Following this change, we note the following:

- There is no recognised carbon reporting standard, it should be greenhouse gas emissions instead.
- Compliance with the ISO14064 standard for creating a GHG inventory is much wider than just the input data. It also includes the design, development and methodology.
- It is not possible to certify the PC emissions to a GHG emissions reporting standard because the PC definition is not compliant with GHG protocol and ISO16064 principles. In particular, the accuracy principle which requires that “uncertainties are reduced as far as practicable” is not possible to achieve as the PC definition fixes emission factors and methodology, which greatly increases uncertainty.

Accordingly, we propose that the input data rather than emissions are verified and assurance that “PC emissions measures” have been calculated as per the Performance commitment definition and parameter is conducted. In this case, an “assurer” is an independent party that can provide appropriate verification of a GHG inventory as defined in the GHG Protocol: A Corporate Accounting and Reporting Standard / qualified in the quantification and reporting of greenhouse gas emissions and removals (e.g. to ISO 14064).

We suggest the following new wording:

“The company is required to confirm that all data relating to its Operational GHG Emissions have been verified by an independent third party. Performance commitment measures have been calculated as set out in the latest “Performance commitment definition and parameters” and this has been assured following an audit by an appropriately qualified independent third-party. An appropriately qualified independent third-party is one who is accredited and capable of providing appropriate certification in the quantification and reporting of greenhouse gas emissions and removals to the GHG protocol: A Corporate Accounting and Reporting Standard (e.g. to ISO 14064:3, Toitū Envirocare’s carbon reduce certification standard, Carbon Trust Standard).”