UUWR_67

PR24 Draft Determination: UUW Representation

Area of representation: Bespoke Performance Commitment – Embodied Greenhouse Gas Emissions

August 2024

This document outlines our representation in response to Ofwat's draft determination related to the Embodied Greenhouse Gas (GHG) Emissions performance commitment

Reference to draft determination documents:
PR24 Draft Determinations. United Utilities – Outcomes Appendix', Section 3.2, pages 6 – 10
PR24 Key Dataset 1: Outcomes data

United Utilities

Water for the North West

1. Key points

- **We accept Ofwat's proposal for a more stretching performance commitment level (PCL) of 5% reduction relative to the PC baseline.**
- **We believe Ofwat's proposal to include a penalty measure for the performance commitment (PC) is acceptable and support the associated reward and penalty rates of £188/tCO_2e and £94/tCO_2e respectively. We also support Ofwat's proposed cap and collar of 0.5% RoRE.**
- **We have not updated our embodied GHG baseline to reflect where costs have been reduced to more align with Ofwat's cost assessment models. This is specific for 8 No. projects included in the phosphorous removal programme and the PC.** We propose that associated embodied GHG emission reductions will be captured within our annual reporting for our 'built solutions'.
- **To add further stretch to our proposed PC, we have included additional projects into our baseline.** We have adjusted our definitions criteria accordingly to reflect these new projects.
- **We propose that Davyhulme WwTW and Eccles WwTW are removed from the PC if Ofwat disagrees with our large scheme gated proposal approach for final determination.**

2. UUW's PR24 proposal

Our PC proposal in our October 2023 plan was to achieve carbon reduction on embodied greenhouse gas (GHG) emissions across 55 projects in our Water Industry National Environment Programme (WINEP) non-infrastructure wastewater programme.

We proposed that the embodied GHG emissions associated with preferred solutions at PR24 final determination (FD) will be the programme PC baseline. We have selected project-in-use (PIU) as the most suitable project gateway where embodied GHG emissions will be measured for the built solution and to inform the PCL. Projects where PIU dates fall outside of FY29/30 were not included in the PC.

We proposed that this measure is outperformance only to recognise the on-going development of consistent and accurate reporting and measurement across the sector, and the high-level nature of design undertaken for the PR24 submission.

The PCL was to deliver the embodied GHG emissions, measured in tCO_2e, associated with our planned PC programme (i.e. reflecting a PCL of 0% change from our FD baseline). Our proposed reward rate was £130/tCO_2e, mirroring the operational performance commitment's incentive rate.

We proposed to report our cumulative annual emissions each financial year (for projects that achieve PIU within that year) to Ofwat throughout the 2025-30 period. Our PCL will represent the total cumulative position at the end of year 5.

3. UUW's understanding of the position in the draft determination

Following draft determination, the following conclusions were reached by Ofwat:

- Ofwat determined that our PC is suitable for progression, recognising the need to reduce emissions associated with the construction of our wastewater non-infrastructure programme and to improve sector learning.
- A more stretching PCL has been proposed, from 0% to a 5% reduction against the proposed baseline (*PR24 Draft Determinations. United Utilities – Outcomes Appendix', Page 10).* This only applies to year 5 of AMP8

(*PR24 Key Dataset 1: Outcomes data)*. We support Ofwat's challenge to further reduce emissions with a 5% PCL and make no further representation within the document.

- To support claims that we have already delivered reductions in embodied GHG emissions in our business plan, Ofwat has requested additional information relating to how these reductions relate to specific projects included within the PC baseline (*PR24 Draft Determinations. United Utilities – Outcomes Appendix'. Table2 Page 8*). We have provided this information within data table ADD22E.12 (see Table 1).
- Ofwat has proposed an increase in the outperformance incentive rate to £188 per tonne of carbon dioxide equivalent removed and the proposal of an underperformance rate of £94 per tonne of carbon dioxide equivalent removed (*PR24 Draft Determinations. United Utilities – Outcomes Appendix'. Page 10).* We accept Ofwat's proposals and make no further representation on this matter.
- Ofwat has imposed a penalty measure for the PC. In addition, a standard outperformance cap and underperformance collar of 0.5% of the company's RoRE has been applied (*PR24 Draft Determinations. United Utilities – Outcomes Appendix', Page 10)*. Using incentive and penalty rates provided by Ofwat, we believe the suggested cap is effective and provides fair incentivisation to pursue innovative low carbon opportunities, whilst sufficiently protecting customers from excessive and undue reward. We believe the collar is also efficient and have no further representation on this matter.
- Ofwat has requested that we set out our updated performance commitment proposal using Ofwat's common performance commitment template, including incorporating any clarifications provided throughout the query process. We have made the necessary updates to the performance commitment document (*UUWR_68_Embodied GHG Definition Document)* and can confirm all clarifications from the query process have been incorporated. In particular, all projects included in the PC follow a consistent carbon estimating methodology as detailed in the definition document listed above.

4. Issues and implications arising from the draft determination

Phosphorous removal programme efficiencies at draft determination

In response to draft determination, we have proposed to deliver key projects from our AMP8 phosphorous removal programme at a lower cost to better align with Ofwat's cost assessment models. This is outlined further in UUWR_33_P Removal. A proportion of these projects (8 No.) are included in our proposed embodied GHG PC baseline i.e. Altrincham wastewater treatment works (WwTW), Crewe WwTW and Garstang WwTW. We intend to deliver these projects throughout AMP8 for the proposed lower cost by working with our delivery partners, identifying and embedding programmatic opportunities and applying our carbon management and reduction process (i.e. following avoid/switch/replace) throughout the design process. This will allow us to minimise the scale of construction and reduce embodied GHG emissions, whilst still achieving the required environmental outcome for each relevant wastewater treatment works (WwTW).

In response to draft determination, we have had insufficient time to fully explore and quantify embodied GHG emission reductions resulting from reducing the cost of our phosphorus removal programme, at an individual project level. We therefore believe it is reasonable to not provide updated avoided emissions / 'reduction in emissions incorporated into baseline' data (*Data Table ADD22E.12*) at this stage for the 8 No projects. Our embodied GHG emission baseline i.e. 'programme baseline without reductions' (*Data Table – ADD22EE.10*) therefore remains unchanged for these select projects. We propose that embodied GHG emission reductions, resulting from reducing the overall cost of the phosphorus removal programme, will be captured within our annual reporting of our 'built solutions'.

Inclusion of Salford WwTW and Eccles WwTW into the performance commitment

To further challenge ourselves in reducing embodied GHG emissions from our most intensive and diverse non-infrastructure wastewater treatment projects, we propose to include Salford WwTW and Eccles WwTW into the PC baseline.

The primary drivers for Salford WwTW and Eccles WwTW generally relate to low biological oxygen demand (BOD), ammonia and phosphorus (in addition to cypermethrin for Eccles WwTW), which are the influencing factors for a significant rebuild of these WwTWs. However, these projects also have a secondary driver to reduce storm overflow spills in line with updated national legislation. This storm overflow driver was excluded in our October 23 business plan PC definition criteria *(UUW30 – Table 79).*

At draft determination, we propose to re-consider our exclusion of the storm overflow driver, specifically for Salford WwTW and Eccles WwTW. The scale of improvements required at these WwTWs is extremely large (detailed in *UUWR_11.2_Appendix – Eccles WwTW and UUWR_11.4_Appendix – Salford WwTW*), and the combined embodied GHG emissions associated with these projects account for over 56,000 tCO_2e, equating to 42% of the updated total PC baseline. We therefore believe including these projects into the PC is crucial to reducing the short and long term impacts of climate change as a result of our AMP8 capital programme. We believe these projects also provide an opportunity to apply carbon reduction best practice and innovation at scale to wastewater treatment works with stringent environmental permits. This provides a unique opportunity to share valuable learnings with the wider water industry in readiness for the challenges of AMP9 and beyond. To reflect our proposals outlined above, we have updated our performance commitment definition criteria and baseline projects (*UUWR_68_Embodied GHG Definition Document)* for draft determination.

For Eccles WwTW we have concerns relating to deliverability risk, as a result of the project being included in Ofwat's proposed large scheme gated mechanism at draft determination. We propose that Eccles WwTW should only be included in the PC baseline if it is removed from the large scheme gated mechanism at final determination, this is detailed further in the section below.

Ofwat's proposed large scheme gated mechanism

Eccles WwTW and Davyhulme WwTW P Removal form part of Ofwat's proposed large scheme gated process. We have represented our concerns on these projects being included in this process in *UUWR_11_Gated Mechanism*, *UUWE_11.1_Appendix – Davyhulme WwTW* and *UUW_11.2_Appendix – Eccles WwTW*.

A consequence of these projects remaining in the large scheme gated process is the risk of having to undertake a contractual review and potentially re-start market engagement for contractors to build the schemes i.e. outside of the Enterprise commercial arrangements currently in place. This process will lead to programme delays and risks the project in use (PIU) and regulatory dates for these projects. As part of our proposed PC definition *(UUW30 – Table 79)*, we require that all projects have a PIU before the end of AMP8, allowing sufficient time to capture and report the 'as-built' emissions associated with our projects. Due to the commercial challenges of delivering Eccles WwTW and Davyhulme WwTW via the large scheme gated process, we believe there is a risk to the achievement of PIU before the end of the FY29/30 period and therefore the deliverability of the proposed PC.

As outlined in *UUWR_11_Gated Mechanism*, we consider that Eccles WwTW and Davyhulme WwTW P Removal should be removed from the large scheme gated process and placed into the enhanced engagement and cost sharing scheme. We have clarity of the requirements, scope, costs and delivery plan and are confident the enhanced engagement and cost sharing scheme will allow us to progress towards the PIU and regulatory dates for these projects, whilst providing appropriate assurance and protection for customers. If Ofwat disagrees with this approach, we propose that Eccles WwTW and Davyhulme WwTW P Removal should be removed from the PC baseline.

The ADD22E table provided below (Table 1) reflects how the baseline will change if Davyhulme WwTW P Removal and Eccles WwTW are removed from the PC at final determination.

Table 1: ADD22E with Davyhulme WwTW P Removal and Eccles WwTW removed from the PC baseline

Embodied greenhouse gas emissions [UUW]	Units	DPs	Constant	2025-26	2026-27	2027-28	2028-29	2029-30
Programme baseline without reductions, Tonnes CO_2e	Tonnes	2		13,303.00	1,861.00	0.00	9,288.00	81,345
Programme baseline without reductions, cumulative, Tonnes CO_2e	Tonnes	2		13,303.00	15,164.00	15,164.00	24,452.00	105,797
Reduction in emissions incorporated into baseline, Tonnes CO_2e	Tonnes	2		1,441.00	0.00	0.00	0.00	12,554.00
Reduction in emissions incorporated into baseline, cumulative, Tonnes CO_2e	Tonnes	2		1,441.00	1,441.00	1,441.00	1,441.00	13,995.00
Programme baseline, Tonnes CO2e	Tonnes	2		11,862.000	1,861.000	0.000	9,288.000	68,791.000
Programme baseline, cumulative, Tonnes CO_2e	Tonnes	2		11,862.000	13,723.000	13,723.000	23,011.000	91,802.000
Built solutions at project-in-use gateway (AMP8), Tonnes CO_2e	Tonnes	2						
Built solutions at project-in-use gateway (AMP8), cumulative programme, Tonnes CO_2e	Tonnes	2						
Reduction % from baseline	%	2						

Source: PR24 Draft determination Tables

5. What Ofwat can do in the final determination to address these issues

Following review of the draft determination, we propose the following for final determination:

- Ofwat should accept our proposal to not update our embodied GHG emission baseline (i.e. 'programme baseline without reductions' – *ADD22EE.10* and 'reduction in emissions incorporated into baseline' data - *ADD22E.12*), as a result of reducing the cost of our phosphorous removal programme to more align with Ofwat's cost assessment model at draft determination.
- Ofwat should accept our proposal to include Salford WwTW into the PC baseline.
- Ofwat should accept our proposal to include Eccles WwTW into the PC baseline, unless it forms part of Ofwat's large scheme gated mechanism at final determination. In which case we propose it should be removed from the PC baseline.
- Ofwat should accept our proposal to remove Davyhulme WwTW P from the baseline if it forms part of Ofwat's large scheme gated mechanism at final determination.