

PR24

Consultation on PR24 operational greenhouse gas emissions performance commitments definitions

March 2023

United Utilities response to Ofwat's consultation

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1. Introduction

- 1.1.1 United Utilities is working across the climate change agenda to ensure the ongoing affordability and resilience of essential water and wastewater services. We have been reporting our greenhouse gas (GHG) emissions for around 20 years and are actively managing emissions to play our part in mitigating climate change. We were the first in the sector to independently verify Science Based Targets for all relevant emissions in scopes 1, 2 and 3.
- 1.1.2 We welcome Ofwat’s consultation on the PR24 operational GHG emissions performance commitments (PC) definitions, and provide our response in this document. The response provided in this document follows our response to Ofwat’s consultation on regulatory reporting for the 2022-23 reporting year and our response to Ofwat’s PR24 draft methodology, particularly question 12.6.
- 1.1.3 The proposals for annual performance reporting for GHG emissions and the PC definitions, in combination, should help the sector towards even more consistent and effective reporting and further improvement in the management of GHG emissions. In this response, we provide recommendations for how the proposed approach can be further improved to help the industry work effectively in AMP8 towards long term net zero targets.
- 1.1.4 There are two key areas where we believe Ofwat should further reflect on its proposals.
- 1.1.5 Firstly, to assess management progress in the two common operational GHG emissions PCs, and to avoid the reflection of changes in carbon accounting methodologies, we consider that it’s important the sector develops and uses an effective reporting tool¹ that includes a static version of emissions factors and carbon accounting methodologies for use throughout AMP8. We recommend this tool is closely aligned to the version of the UK Water Industry Research Ltd (UKWIR) Carbon Accounting Workbook (CAW) in use at the Final Determination. We assume this will be version 18 (CAW v18). This approach will help secure alignment of the levels of the operational GHG PCs confirmed in the Final Determination, with AMP8 reporting and assessment of the Outcome Delivery Incentives (ODIs).
- 1.1.6 Secondly, we strongly believe that Ofwat should reconsider its proposal to limit recognition of inseting in AMP8. We consider such limits could be appropriate in the longer term, but at this relatively early stage of companies’ net zero plans, we consider the use of insets is a widely regarded as a valid and beneficial activity within a well-rounded plan to net zero. The use of inseting could potentially be reduced over the longer term as alternative methods and technologies become available that provide for cost-effective carbon mitigation elsewhere in the business.
- 1.1.7 In this response we also provide our comments and queries on the draft definitions for the water and wastewater operational GHG emissions PCs. We will also submit these queries to the PR24 mailbox PR24queries@ofwat.gov.uk, in line with the queries we submitted on the common PC definitions which Ofwat published in December 2022.
- 1.1.8 We welcome and actively support the open approach taken by Ofwat and the industry in developing these two PCs. We look forward to further collaboration in the development of performance reporting in this area.

¹ For distinction, in this consultation response, we will refer to the tool we propose to be used to report against the AMP8 common performance commitments as the “AMP8 Performance Commitment Reporting Tool” or “AMP8 PC Reporting Tool”.

2. Question 1 - Do you have any comments on our proposal to include additional reporting categories in the definitions of our PR24 operational GHG emission PCs?

2.1.1 We support the intent to include in the PR24 operational GHG emission PCs additional reporting categories linked to chemicals, fuel and energy-related activities, and waste generated in operations. However, more clarity is required and we set out below a suite of considerations and recommendations to help ensure an effective approach.

Chemicals

2.1.2 We support Ofwat’s aspiration to improve the reporting of chemicals emissions and incorporate this into the new operational PCs, but further work is required to enable consistent and meaningful reporting in the sector.

2.1.3 In 2020, United Utilities introduced a new capability to annually estimate the emissions from the chemicals used in our operations, recognising this was an area of our carbon accounting that needed more attention. This is part of the scope 3 assessment we disclose in our annual report and financial statements, and in our annual performance report. Whilst amongst leaders in this area of carbon reporting, our estimate of chemicals emissions is currently “low confidence” and it relies on a spend based, rather than volume based, methodology with various assumptions and estimates. We are actively working with chemicals suppliers to support the development and sharing of data needed to improve the accuracy of our approach.

2.1.4 In addition, the sector has established rudimentary functionality on chemicals in the CAW. This functionality of the CAW is also currently “low confidence”, primarily because there is limited availability and quality of emissions factors for chemical products. Further work is therefore needed to adequately define effective and consistent approaches to support industry comparison in annual performance reporting and the PR24 operational GHG PCs.

2.1.5 The sector working group that leads the development of the CAW is already discussing the need for improvements in the estimation of emissions from chemicals. We will promote to the working group and UKWIR, the need for priority attention on the proposals in this consultation, to shape the scope of the next update to the CAW in 2023/24, and the related development of an AMP8 PC Reporting Tool (as per our response to question 3, below).

2.1.6 The boundaries of “emissions associated with the production of chemicals used in water and wastewater processes” require detailed definition to achieve consistent reporting by companies. As part of our ongoing collaboration, companies in agreement with Ofwat need to agree a consistent approach including definitions for:

- (a) What is included within the definition of chemicals e.g. in liquid, solid or gas form.
- (b) A standard list of chemicals to be included, and a mechanism to deal with any chemicals that may be missed or become relevant.
- (c) The emissions factors for each chemical, recognising variation in volumes, concentrations and formulations.
- (d) Which emissions are included within the emission factor. We propose alignment with the Corporate Value Chain (scope 3) Accounting and Reporting Standard which requires a minimum of cradle-to-gate emissions for scope 3 category 1 products and services such as chemicals. Cradle-to-gate would include raw materials, production and transportation emissions of the raw materials and product.

- 2.1.7 Over the coming 18 months, we suggest Ofwat and the sector collaborate in developing the necessary detail and supporting tools. In 2024, a decision can then be made on the practical ability to include chemicals in the final construction of the PR24 operational GHG PCs. This should also allow us and other companies to report a suitable baseline, and annually thereafter. Please see related points in our answer to question 3 of this consultation.
- 2.1.8 National government actions could also help improve the availability of emissions factors for chemicals, for example with the introduction of frameworks, standards and requirements for chemicals suppliers and their supply chains to develop and make available consistent and robust emissions estimates of chemical products. This would be beneficial beyond the water sector.
- 2.1.9 For further details on this, please also see our 3 March 2023 response to Ofwat’s consultation on Regulatory Reporting for 2022/23.

Waste generated in operations

- 2.1.10 **We agree with Ofwat’s proposal to include emissions from waste generated in operations. In our annual reporting, United Utilities reports emissions from all waste generated in operations as per the GHG Protocol² and guidance from the Science Based Targets initiative (SBTi). This includes office waste, hazardous waste and construction waste, as well as sludge disposal. To ensure consistency across the industry, we propose that only emissions related to sewage sludge disposal to land is included in PC reporting.**
- 2.1.11 Our interpretation of the activities stated in the consultation, as in the scope of the PCs, is that companies should report all the emissions relating to the transportation, treatment and disposal of sludge, regardless of whether it is carried out by U UW or a third party. United Utilities already reports sludge treatment, transport and disposal in our published United Utilities Group accounts³ as per definitions in the GHG Protocol and in table 1 below.

2.1.12 Table 1 Sludge transport, treatment and disposal as reported by United Utilities:

Activity	Party	GHG Protocol Scope	Scope Sub-category
Sludge transport	Company	Scope 1	Transport: Company owned and leased vehicles
	3 rd party	Scope 3	Category 4 - Upstream transportation and distribution
Sludge treatment	Company	Scope 1	Process and fugitive emissions
	3 rd party	Scope 3	Category 1 - Products and services
Sludge disposal	Company	Scope 3	Category 5 - Waste generated in operations
	3 rd party	Scope 3	Category 5 - Waste generated in operations

- 2.1.13 Page 7 of Ofwat’s consultation states: *“linked to the disposal and treatment of waste particularly relating to bioresources”* in relation to the scope of both the water and wastewater PCs. We would welcome confirmation from Ofwat that their intention is to include treatment and disposal of sewage sludge only in the wastewater PC. We recommend the reference to bioresources is removed from the water PC as it is not relevant to water operations.
- 2.1.14 We propose further clarification is needed for the term *“emissions from land”* and its inclusion within scope 1 emissions (as per Table 1 in the consultation appendices). Our interpretation is that this is referring to sewage sludge that is recycled to company owned land, as distinguished from that recycled to other land. However, these emissions result from waste generated in operations and therefore are

² Greenhouse Gas Protocol: 2011, 'Corporate Value Chain (scope 3) Accounting and Reporting Standard'.

³ [UU Approach to climate change 2022](#)

scope 3 emissions, regardless of land ownership and who undertakes the activity, see above table 1. We therefore propose that these emissions are reported under “disposal and treatment of waste”.

Fuel and energy-related activities

2.1.15 We agree with Ofwat’s proposal to include emissions on fuel and energy related emissions within the operational GHG PC but we would like to ensure that our interpretation of this proposal is consistent with Ofwat’s intentions.

2.1.16 Our interpretation is that “*purchased electricity and heat: extraction, production, transmission and distribution*” refers only to “*transmission & distribution*” and “*well to tank*” emissions for electricity and heat respectively and that it excludes “*well to tank*” emissions relating to liquid fuels such as diesel. We propose that the lines in consultation Table 1 are renamed as set out below:

Relevant Emissions Proposal	Suggested Alternative
Purchased electricity: extraction, production, transmission and distribution (location-based)	Purchased electricity: well to tank & transmission and distribution.
Purchased heat: extraction, production, transmission and distribution	Purchased heat: well to tank & transmission and distribution.

Other – Reporting methodologies

2.1.17 We propose that more detail should be provided in the definitions of the relevant emissions for the operational GHG emissions PC, in particular the expected reporting methodologies. This would enable consistent reporting between companies for all the activities listed in Table 1.

2.1.18 For example, wastewater process emissions is one component of the Process and Fugitive emissions and is an area where the estimation methodology is likely to significantly evolve over the next few years to improve the accuracy and alignment to new guidance. We are currently implementing monitoring at our largest co-located wastewater and bioresources sites. Until sufficient monitoring data is available, we would propose that the emissions factor in the CAW is updated to the factor referenced by IPCC 2019⁴. The industry is working through the options and, in consultation with Ofwat, a selected methodology will need to be incorporated in the AMP8 PC Reporting Tool, as per Question 3 of this consultation. Allowing inconsistent reporting between companies will reduce the transparency of reporting, distort the efficiency of decision making and reduce the effectiveness of any incentive properties that arise from the metrics being reported. It would be vastly preferable and entirely proportionate, therefore, to ensure companies are committed to a consistent methodology and reporting approach from the outset.

Other – Insetting

2.1.19 Regarding the proposal on the inclusion of certain emissions within the PC, we support the inclusion of insets linked to the implementation of nature-based solutions. We do not support the inclusion of a limit on recognition for insetting in AMP8, although this could be appropriate in the longer term.

2.1.20 Companies should be able and incentivised to manage their plan to net zero in the most efficient and effective ways that deliver for customers, stakeholders and the environment. The proposed 1% limit on insets is an unjustified disincentive to cost beneficial activities, and is counterproductive at this relatively early stage of companies working to achieve stretching goals for carbon reduction. It might be appropriate to introduce a higher cap in the longer term, when companies and the sector have mature mitigation plans and programmes that follow the best practice GHG hierarchy. The best practice SBTi Corporate Net Zero Standard currently allows an organisation to offset up to 10% of its emissions, and we know this is an important part of our route to net zero 2050.

2.1.21 Insetting is widely regarded as a valid and beneficial activity within a well-rounded plan to net zero. In the water sector, insetting activities can deliver multiple benefits with a strong cost-benefit ratio. For

⁴ [IPCC guidelines V5.6 Ch6 Wastewater](#)

example, our work to plant one million trees in the North West will deliver benefits for carbon and water quality, water flows and flood management, recreation and nature.

- 2.1.22 Limiting offsetting incentives at this early stage is unhelpful to long term goals. Bold action on land management types of insetting activity is required in the short term because of the lead time needed to plan and deliver the activities, and for the natural processes to establish and mature to a state that delivers the bulk of the carbon benefit.
- 2.1.23 We would like to work with the sector to clarify the principles and methods which we will all use to quantify and evidence the emissions benefit linked with the implementation of nature-based approaches. The use of externally verified certificates for insets - such as woodland carbon units using the Woodland Carbon Code - could provide sufficient evidence for that type of insetting. However, clarity and agreement is needed on suitable evidence for other types of insets linked to nature-based intervention. We also note, from our experience, the difficulties in deploying the Peatland Code in practice at scale and pace. The sector's approach needs to recognise and shape this emerging area, which currently has no clear approach to best practice and few recognised standards and frameworks with only limited application to date.
- 2.1.24 Ofwat references energy exports in the insetting section of the consultation. Our interpretation of this section of the consultation is that any insetting cap would relate only to nature-based approaches, while energy exports are a different matter, and not included in any insetting cap but are relevant in the PCs and working towards net zero.

Other – Normalisation

- 2.1.25 The consultation refers to the use of intensity ratios / normalising values to be reported as kgCO₂e per mega litre (Ml) of distribution input for the water operational GHG emissions PC and kgCO₂e per Ml of volume of wastewater received at treatment site for the wastewater operational GHG emissions PC, as per the draft definitions in Appendices 1 and 2 of the consultation. For reporting of the PC, we propose that Ofwat cross references the APR table references for the water and wastewater volumes to ensure that there is no ambiguity when definitions can be very similar. We interpret Ofwat's intention is that *Distribution input (water)* is the value captured in cell reference 6B.4 and *Volume of wastewater received at treatment site* is as captured in cell reference 7C.13.
- 2.1.26 As referenced in our PR24 draft methodology response in September 2022, as an industry we have reported for many years using the normalising units of per Ml of treated water and per Ml of sewage treated. We agree that a similar unit is appropriate for ongoing sector reporting. To avoid unfairly benefitting or penalising companies when setting GHG PC targets, we recommend that it will be necessary to recognise regional factors that will be material to performance, such as the operational emissions impact of a different size Water Industry National Environment Programmes (WINEP) and differing geographies, such as those companies serving a large proportion of rural areas.

3. Question 2 - Do you have any comments on our proposal to allow companies to claim GHG emissions reductions when trading bioresources?

3.1.1 We broadly agree with the principles of this proposal, however the reference made to the location-based method is confusing.

3.1.2 Table 1 refers to the scope 1 and 3 emissions that result from the treatment and disposal of sludge, however section 3.1.2 of the consultation refers to “sludge trading disincentivising companies when using a location-based reporting approach”. The location-based method is linked to scope 2 emissions in the GHG Protocol scope 2 guidance⁵. Our interpretation is that Ofwat is enabling companies to reflect in the PCs the net emissions reduction relating to green energy generated from the treatment of sludge.

3.1.3 Please can Ofwat confirm or clarify our interpretation that:

- (a) The reporting company could reflect net emissions reductions in their reporting and PCs where they work with a third party for sludge treatment and disposal, and the reporting company purchased from the third party the energy generated with supporting renewable electricity or gas certificates (RGGOs and REGOs). This would be reported as an emissions reduction from renewable energy, as per Table 1 “Relevant emissions” of the consultation.
- (b) It would be defined as self-generation, thus reducing the volume of electricity purchased in their scope 2 emissions, where the reporting company themselves treat sludge and generate renewable electricity that is used in their own operations.
- (c) The reporting of sewage sludge traded in to United Utilities is excluded from reporting against this PC. This is a non-appointed activity which would be captured in the producing company’s scope 3 emissions against this PC.

3.1.4 Figure 1 below highlights United Utilities’ interpretation of the sludge trading process and Ofwat’s proposed reporting of emissions reductions, as described on page 8 of the consultation.

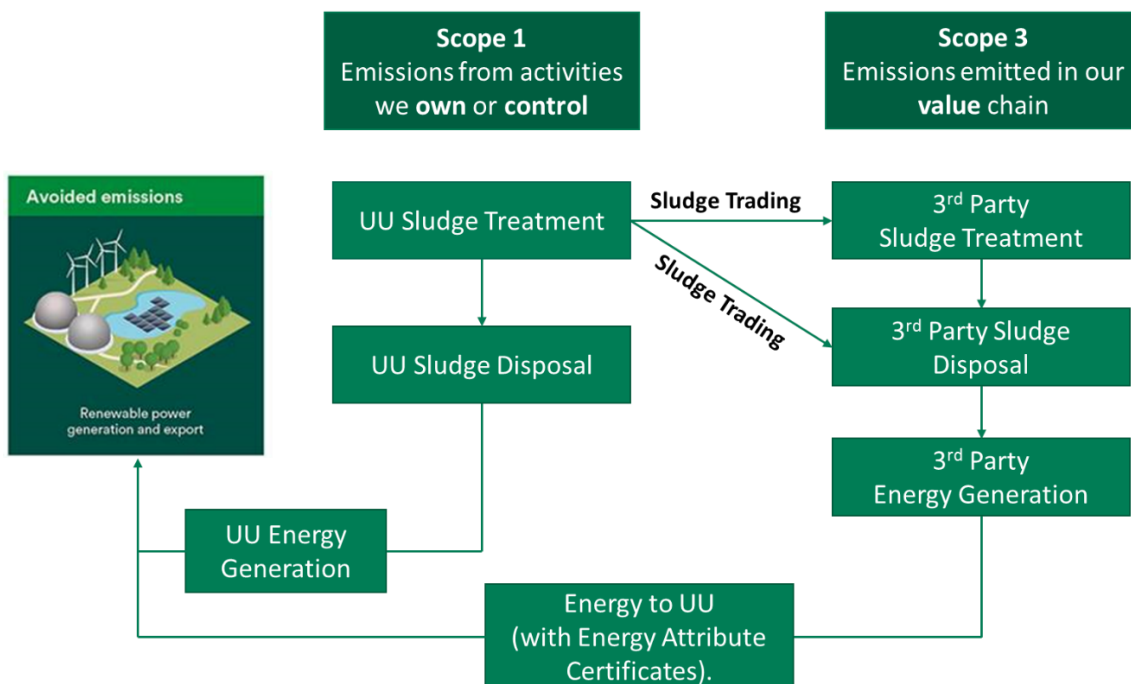


Figure 1 – UU’s interpretation of the sludge trading process and proposed reporting of emissions.

⁵ https://ghgprotocol.org/scope_2_guidance

4. Question 3 - Do you have any comments on our proposal to use one version of the CAW throughout PR24 to assess progress against the PCs?

- 4.1.1 **We support the use of one fixed version of the CAW throughout AMP8 to assess progress against the two common operational GHG PCs. Our interpretation is this will be the version of the CAW in place at PR24 Final Determinations. We propose that companies and Ofwat collaborate through UKWIR to create the AMP8 PC Reporting Tool, based on the version of the CAW in place at PR24 Final Determinations, and that this tool, its methodologies and emissions factors will be fixed for the five years of AMP8. Separately, we support the ongoing regular update of the CAW for annual reporting purposes.**
- 4.1.2 We understand that Ofwat supports the industry's proposal to create a bespoke AMP8 PC Reporting Tool to be used to support the consistent and effective reporting of the relevant emissions data outlined in Question 1 of the consultation. We recommend this Reporting Tool is based on the principles of the CAW, with a fixed set of methodologies (e.g. wastewater process emissions) and emissions factors for the five year period to ensure focus on management performance.
- 4.1.3 If Ofwat requires companies to report emissions by price control, a consistent approach will need to be developed by companies and Ofwat prior to the development of the tool. For example, aspects such as 'sludge transport' and 'sludge treatment' are not currently split between Wastewater Network Plus and Bioresources. There are also some cross price control activities such as peatland restoration and woodland creation, which would need to be split consistently between price controls.
- 4.1.4 By having a fixed reporting tool based on the principles of the CAW, the respective baselines for the PCs will remain the same and appropriate throughout AMP8. The baselines for the PCs could be produced once the AMP8 PC Reporting Tool is available. This will enable consistent comparison between the baselines and AMP8 reporting.
- 4.1.5 We have a general preference for stability and consistency within an AMP, with only rare exceptions where there is a highly material value requiring revision. A static approach helps focus and report on management interventions, not just accounting changes.

5. Question 4 - Which version of the CAW do you consider it is feasible to use throughout PR24 and why?

- 5.1.1 Please refer to our answer in Question 3 where we support the intent for an AMP8 PC Reporting Tool with static emissions factors and methodologies.
- 5.1.2 For annual performance reporting of our annual emissions footprint, we recommend continuing with the current industry good practice for updating the CAW each year with evolving methodologies and latest emissions factors.

6. Queries on the draft definitions for the water and wastewater operational greenhouse gas emissions performance commitments

6.1.1 We have reviewed the draft definitions for the water and wastewater operational GHG PCs provided in appendices A1 and A2 of the consultation and have the following queries on them. We will also submit these queries to the PR24 mailbox PR24queries@ofwat.gov.uk.

Operational GHG emissions performance commitment – water only

6.1.2 **Query 1** - The two PC definitions are identical, yet we suggest that references to activities or emissions relating to wastewater and bioresources should not be included in the Water PC definition. For example, A1.2 table 1 lists “Emissions reductions: exported biomethane” and emissions from sludge to land, but we do not think they apply to water operations, and they only need to appear within table 1 of the Wastewater PC. As stated in our response to Question 1, our interpretation is that the sludge to land activity relates to sewage sludge disposal only. Please can Ofwat confirm if these *relevant emissions* should be listed only in the Wastewater PC definition?

Operational GHG emissions performance commitment – wastewater only

6.1.3 **Query 1** - Is it Ofwat’s intention to provide guidance on the definitions of the relevant emissions for the operational GHG emissions PC and also the preferred estimation methodologies? This would enable consistent reporting between companies for all the activities listed in Table 1. For example, wastewater process emissions is one component of the “Process and Fugitive emissions”, but this is likely to change to take into consideration the outcomes of the recent research and monitoring of wastewater process emissions. The methodology chosen will also need to be incorporated in the AMP8 PC Reporting Tool in consultation between Ofwat and companies as per Question 3 of this consultation.

Operational GHG emissions performance commitment – both water and wastewater

6.1.4 **Query 1** - Will further details be provided on how any normalising value chosen for PC performance reporting takes into consideration regional disparities to avoid unfair benefit or penalties, for both water and wastewater? For example, to consider companies with variable operational impacts from their WINEP, or with different geographies such as those who serve a comparatively large proportion of rural areas.

6.1.5 **Query 2** - Will growth pressures be taken into account when setting PC Levels (PCLs), for example from the operational emissions impact of environmental regulatory requirements?

6.1.6 **Query 3** - Please can you confirm if reporting emissions from carbon capture and storage projects under the emissions reductions section within the operational GHG emissions PC (*Table 1 Relevant Emissions*) is acceptable within the PC scope?

6.1.7 **Query 4** - The consultation states companies are to “report its GHG emissions using the fixed national grid factor for 2021-22”. As this applies to scope 2 emissions only, can Ofwat confirm which baseline year should be used for other emission factors (such as fuels, waste, etc.)? It is our interpretation that these factors will be set at PR24 Final Determinations and then fixed for the five year period using the AMP8 PC Reporting Tool. Please can Ofwat confirm if our interpretation here is correct?

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