

By email: annual.reporting@ofwat.gov.uk; [REDACTED]

6 March 2023

Dear Ofwat colleagues,

Northumbrian Water Group response to ‘Consultation on PR24 operational greenhouse gas emissions performance commitments definitions

Thank you for the opportunity to respond to your ‘[Consultation on PR24 operational greenhouse gas emissions performance commitments definitions](#)’. As a leading company with an existing outcome delivery incentive (ODI) on operational greenhouse gas emissions for the current AMP, we welcome the introduction of a common performance commitment (PC) to incentivise the reduction of greenhouse gas (GHG) emissions.

We do however have a number of concerns with the way that the proposed performance commitment is defined. This letter sets out our major concerns and responds to your specific questions below.

The GHG emissions reduction PC should be designed to be affordable, transparent and must follow best practice. We are concerned that the proposals do not meet these requirements. Our key concerns are as follows.

Market-Based vs Location-Based

We are agnostic as to which accounting methodology should be used (either market-based or location-based). Our key concern is Ofwat’s proposed hybrid location-based / export-only market-based approach. This serves to diverge the sector from international accounting standards and introduces unnecessary complexity and market distortions which will reduce customer and environmental benefit.

International standards are entirely necessary as they provide:

- A valid framework for companies to operate in;
- Guidance which auditors can rely on in validating emissions;
- Principles for use by UKWIR in developing carbon accounting tools; and
- Minimal risk of over/under accounting of emissions locally within the sector and at UK level.

Failure to align to an international standard will require that Ofwat themselves a) produce comprehensive guidance, b) give detailed input into future Carbon Accounting Workbooks (CAWs), and c) dynamically respond to changes to the ODI caused by external factors (e.g., Renewable Energy Guarantees of Origin (REGOs) and Renewable Gas Guarantees of Origin (RGGO) rules are currently under review in a way that could make the proposed PC methodology undeliverable from the outset). As such, this hybrid approach does not appear to be sensible or efficient for Ofwat.

Scale of the baseline

Setting the baseline from which emissions are reduced will be challenging and is fundamental to setting effective incentives. PR24 will see significant statutory investment in additional treatment processes through the Water Industry National Environment Programme (WINEP), this will increase energy and chemical demand per Ml of wastewater treated. Setting a baseline based on the current normalised emissions would ignore the increased carbon intensity of treating wastewater and penalise water companies for delivering their statutory obligations.

Ofwat's proposed PC definition does not detail how this issue will be addressed. We propose two options:

1. **Static:** A baseline is set in the price control determinations for each year which includes an allowance for the additional emissions that will arise due to the additional treatment processes required in the WINEP. This would have the advantage of being relatively simple as it would be set in advance, but would not make allowance for in period changes, for example delays to scheme delivery.
2. **Dynamic:** each year the baseline would be adjusted to account for the additional treatment processes that have been brought online. This would add complexity, and a methodology would need to be set out to direct how these adjustments are made. However, it would enable the PC to more accurately reflect the scope of treatment that emissions would be driven by.

Offsets & Insets

Further, with Ofwat preferring location-based reporting combined with the restrictive approach to insets and offsets, Ofwat should recognise that this approach will not support emissions reductions being delivered in the most cost-effective way.

An approach that allows for offsets that are relevant, have high confidence emissions reductions and are assured could deliver customer benefits. However, the proposed rules for insets are overly restrictive:

- The emissions reductions from land only being allowed where this is for a nature-based solution means that carbon benefits from land used for biodiversity net gain would not qualify. This disincentivizes this sort of activity without any justification.
- The 1% limit is a) arbitrary and b) makes it a small enough goal to aim for that there is very limited incentive for companies to do anything on this. If these emissions reductions are genuinely good for the environment, which they must be for you to consider allowing any reduction from them, why should this be limited to 1%?

We also consider that not allowing for actual emissions of purchased electricity rather than the grid average disincentivises innovation. For example, we are working on an approach to minimize our emissions in real time depending on the actual grid generation mix, which would have genuine carbon benefits but would provide no benefit to this incentive.

The same principle would apply to lower-carbon purchases of chemicals and other products. If we are only able to account for average emissions for products, we will be disincentivised from reducing the emissions from the specific products we buy. We would only be able to reduce emissions by reducing the total quantity of a given product we buy.

Price Controls

GHG emissions are a global problem, therefore the best thing to do is to reduce emissions where it is lowest cost – be that at a global, national, local or company scale. Having separate incentives for water and wastewater does not support the most efficient emissions reductions and will increase reporting complexity and boundary issues.

Additionally, the current incentives also ignore GHG emissions from residential retail activities without any justification being given. There is no reason that these emissions should not be incentivised – the emissions are no less damaging for being from natural gas used for space heating for call centres or diesel used for meter reading vans rather than natural gas used for wastewater treatment or diesel used for our mains repair teams' vans for example. Incentivising the reduction of these emissions would not distort competition as residential retail is still a regulated business. Under our current ODI these emissions reductions are already incentivised for NWL – it would be a step backward to remove this incentive.

Having separate incentives that do not cover all our business will also require not just robust GHG emissions recording, but also allocation between business units. This is a difficult, costly and time-consuming exercise to get right, as was learnt by the sector when the price controls were split between retail and wholesale activities at PR14. If doing so where to create an improved incentive, then the additional cost and complexity could be justified. But the proposal reduces the incentive's coverage of emissions and effectiveness, so the complexity seems difficult to justify.

We therefore consider a single incentive that covers all regulated business activity would be more appropriate and effective.

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?

We support an accounting methodology that includes all Scope 1, Scope 2 and Scope 3 emissions regardless of their source.

As far as practical the PCs should include as many emissions as possible. The key issues to resolve are:

1. Validating Scope 3 emissions where supply chains are long/plural; and
2. Ensuring that proper consideration is given to emissions which are increasing due to other statutory performance drivers (such as those driven by the Winep) as these require complex baselining activities to take account of these changes.

Chemicals

We already aim to consider the climate impact of the chemicals we use through our service value framework.

We require further information regarding how the emissions will be calculated under Ofwat's approach. Ofwat should consider whether the emissions factors for each chemical will be a fixed industry standard or whether it will be possible to differentiate between suppliers. Differentiating

between suppliers would incentivise innovation in the supply chain, but it is questionable as to whether data would be sufficiently robust/transparent for use in determining customer bills.

If Ofwat wishes to use fixed emissions factors for chemicals, it should set out how those emissions factors will be set and by whom. Where chemical emissions have a bill impact of the same magnitude of energy emission then it is necessary that the chemical emissions factors used are similarly robust, otherwise Ofwat risks over/undervaluing certain emissions reductions.

Waste to Land

We support the inclusion of emissions relating to water and wastewater sludges to company and 3rd party landbanks. We consider that continued use of landbanks is necessary and an important option for UK agriculture in reducing its emissions from fertilisers.

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

We disagree with the proposed approach. We consider that a consistent application of either a location-based or market-based approach would:

- Prevent the introduction of inefficiencies; and
- Increase the practicality and likelihood of efficient bioresources trading.

In the consultation Ofwat asserts that *“we are aware that our requirement for companies to report using a location-based method could disincentivise companies from trading sludge”* and that the solution to this is to allow market-based reporting of bioresources. This is illogical – any perceived disincentive for a sludge exporter is equal and opposite to the increased incentive for the sludge importer. Any PC may move the gate fees for sludge in favour of the sludge exporter, but it will not affect the overall efficiency PROVIDED THAT Ofwat does not introduce distortions, as the PC benefits can be priced into the bioresources contract.

The far greater risk is the introduction of a hybrid accounting methodology that prevents efficient allocation of sludges and/or effective contracting between WASCs. We are actively bidding to provide bioresources treatment services to other wastewater companies. For companies to be willing to trade with us they need to have regulatory certainty that they will not be penalised for doing so through the GHG emissions PC.

We consider that the proposed approach is sufficiently distortive that, if introduced, it will not (for the reasons set out below) be used in AMP9 – as such the proposal will prevent effective bioresource trading in AMP8 as companies will be aiming to contract in a way that is likely to be effective for the long term.

Loss of efficiency

By requiring importers of bioresources to provide exporters with a specified proof of emissions reductions, the importers’ options for how to realise best value from the biogas produced would be unnecessarily limited.

For example, if green gas certificates are required to be provided to the exporter, then the importer will be restricted to producing biogas and injecting it into the grid in order to obtain these certificates. However, if relative gas and electricity prices move, then the best value to the importer – and hence their customers – may be to switch from exporting biogas to using it onsite for renewable electricity or for use in vehicles. This change would not affect the overall biogas produced but would affect which party the environmental benefit is attributed to. By locking in the importer to a particular means of returning the emissions reduction benefit to the exporter, the overall production process will be made less efficient.

If instead a location-based approach is used, the exporter will indeed lose the emissions benefits from biogas production from bioresources. However, as the importer will realise this emissions benefit, the financial benefits of this can be incorporated into the contract for treating bioresources. Thus the PC incentive rate can be incorporated into the contract negotiations and so the most efficient outcome can be achieved.

Similarly, if a market-based approach to emissions is adopted – and if REGOs and RGGOs can be used – then the importer will be free to generate maximum value for customers from the bioresources. They could then, by negotiation return the REGOs or RGGOs to the exporter through a contract or the open market.

Practicality

Contracts for bioresource treatment will be difficult to agree, and as with any commodity, the charging framework should be limited to as few variables as possible.

However, in the proposal where environmental benefit is to be passed back to the sludge exporter, then presumably environmental burdens should also be passed back – NWL treats sludge using a combination of Natural Gas, Biogas, self-supplied electricity and grid electricity, our sites also use a range of other fossil fuels in day-to-day operations. In the proposal each of these would have to be apportioned appropriately between the native and imported sludges and then passed back to the exporter. Additionally, processing another company's bioresource will not produce the same biogas output as treating our own. Sludge source, age and composition along with its compatibility with the existing site biology will affect its biogas potential. Again, this calculation would need to be fully agreed and contracted in any situation where the transfer of environmental benefits is mandated.

Location-based vs Market-Based Bioresources

In our view it is far better to have a clear boundary – where the exchange of sludge demarks the point at which environmental benefits and burdens apply. As throughout this response, it is our view that Ofwat should rely on standard GHG accounting practices and NOT produce hybrid GHG measures.

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?

We disagree with the proposal that one version of the CAW should be used throughout PR24 to assess progress against the PC as:

- A single version of the CAW is not in the interests of customers or the environment;
- It introduces a divergence between audit standards and the CAW methodology creating ambiguity;
- It reduces Ofwat's ability to regulate process emissions.

We believe that two preferable options are available to Ofwat:

1. Use the latest version of the CAW in each reporting year; or
2. Define the PC against specific CAW inputs (such as renewable energy produced, or measured process emissions) rather than the calculated company net emissions.

Customer and Environmental Interest

The CAW is continually being updated and improved to reflect the latest information on measurement and estimation techniques, the latest available scientific evidence, and to correct previous errors. It is in customers' interests that we use the most up to date approach to quantifying emissions so that they only pay for the most robustly assured GHG emissions reductions.

We therefore consider that the latest version of the CAW should be adopted, and if re-baselining is required in the period, this is undertaken following a robust process. We think it is the right thing to do to ensure our customers' money is spent most efficiently for us to take on the risks associated with changes resulting from aligning the PC with the most up to date version of the CAW and any potential re-baselining. At present, for our own information, each year NWL checks its baseline emissions in the latest version of the CAW to ensure no material changes in methodology have occurred unnoticed (and as a useful validation of the new CAW). Re-baselining does not create a significant burden on companies (provided that no new data points are required that were not collected historically).

Tying the performance commitment to a single version of the CAW for the entirety of the five-year period would mean that companies would be reporting on a basis that was up to five years out of date. This would not be in the best interest of customers or the environment as it would risk water companies being rewarded or penalised for emissions performance that was being measured in a less robust way than if the latest guidance were being used.

At the outset it could not be said with certainty whether changes to the CAW would increase or reduce either the level of reported emissions or the difficulties companies will face in reducing emissions. So companies could win or lose in terms of ODI payments by using a fixed version of the CAW. But, it can be said with a reasonable level of certainty that the later versions of the CAW will measure GHG emissions more robustly and so serve the purpose of incentivising genuine emissions reductions more effectively.

The proposal to use one version of the CAW for the ODI for the duration of the period is also inconsistent with the proposal to use the latest version of the CAW for APR reporting. This inconsistency will increase the potential for errors in reporting and reduce transparency for stakeholders.

Audit Standards

NWL currently attains accreditation to ISO14064-1 for its GHG emissions. Over the past 3 annual accreditation processes, our external verifier has validated our use of the CAW using a combination of CAW supporting documentation, DEFRA guidance, the GHG protocol and other best practice literature.

It is possible/probable that updated guidance released throughout AMP8 will become misaligned with certain calculations in the CAW if it is fixed at the start of the AMP – as such auditors would have to determine whether to follow the out-of-date methodology or the latest guidance. If the impact on company emissions is material it is likely auditors would require guidance direct from Ofwat, yet it would be inappropriate for Ofwat to become the arbiter in an independent audit of company performance.

Process Emissions

Wastewater process emissions are a current focus of the industry. At present there is no agreed Best Available Technique for monitoring and reporting on these emissions. Best-practice measurement techniques are likely to evolve and develop during the next AMP. As such fixing the methodology may disincentive companies from measuring emissions and improving performance.

Alternative Approaches

As set out above we believe that using the latest version of the CAW would be beneficial. Alternatively, Ofwat may consider a different approach – instead of producing a GHG PC, Ofwat could choose to regulate the CAW inputs that have a material impact on industry emissions such as:

- Energy use;
- Renewable energy produced (electricity and gas);
- Fossil fuel road fuels used;
- Process emissions reductions;
- Chemical use.

This would have the advantage of simplicity as the energy-related emissions sources are extremely easy to quantify to a high degree of accuracy and the process emissions monitoring could be agreed on a case-by-case basis given the pace of the roll-out during the next AMP. Additionally, this would allow Ofwat to set suitable incentive rates based on cost of abatement and wider customer benefit for each input/intervention.

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

The PC definition should be updated to the latest version of the CAW that is available by a given date in the reporting year. The provision of the CAW itself can be relatively late in the year – a manageable timeline would be:

- Any major changes to CAW notified by 01 September in reporting year;
- Draft version of CAW for testing published 01 December;
- Latest version of CAW published by 01 February;
- Ofwat confirms its acceptance of the CAW by 01 March.

Setting a specific cut-off date for when a new version of the CAW would come into effect would help to increase regulatory certainty. By setting this point at the beginning of the reporting year, this benefit is maximised as it allows companies time to ensure that they have the appropriate reporting and audit in place.

Updating the version of the CAW used throughout the period may require re-baselining to ensure that companies are not inappropriately rewarded or penalised. We suggest that a threshold for re-baselining should be set, so for example if performance were to vary by more than 5% purely due to the change in methodology for any company, the baseline should be reassessed.

Ofwat could also manage the risk by being involved in the CAW group.

