

AffinityWater

AFW147 Embedded emissions PC template - Bespoke Performance Commitment Definitions





Embedded GHG Emissions

Purpose: This performance commitment is designed to incentivise the company to reduce the carbon impact of our capital works.

Benefits: This performance commitment supports the mitigation of the impact on the environment by reducing carbon emissions from the delivery of capital projects.

Version control [not required for initial submission, for completion at draft determinations]

Version	Date of issue	Performance commitment changes
0.1		
1.0		
2.0		

Performance commitment definition and parameters

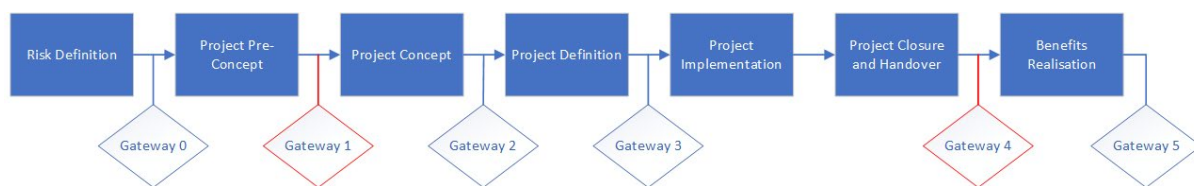
Detailed definition of performance measure

Percentage reduction in embedded GHG emissions arising from capital works from a baseline defined at the Gateway 1 project stage.

At the Pre-Concept stage of a project (Gateway 1), a scope will be defined which will deliver the defined needs for the project. An estimate of the embedded GHG emissions of this scope will be calculated and recorded at this stage and form the baseline figure for the project.

The 'as built' design and construction activities at Project Closure and Handover (Gateway 4) and design estimates for operational emissions will be used to calculate the embedded GHG emissions for the project.

Figure 1: Affinity Water Project Lifecycle



If any changes to the defined need are made after Gateway 1 which requires a re-design a revised carbon estimate will be made, and the baseline will be updated accordingly. Changes of this nature will be recorded by formal change control processes.

Any projects which pass Gateway 1 but do not proceed to Gateway 4 will be removed from the Performance Commitment and no change will be recorded.

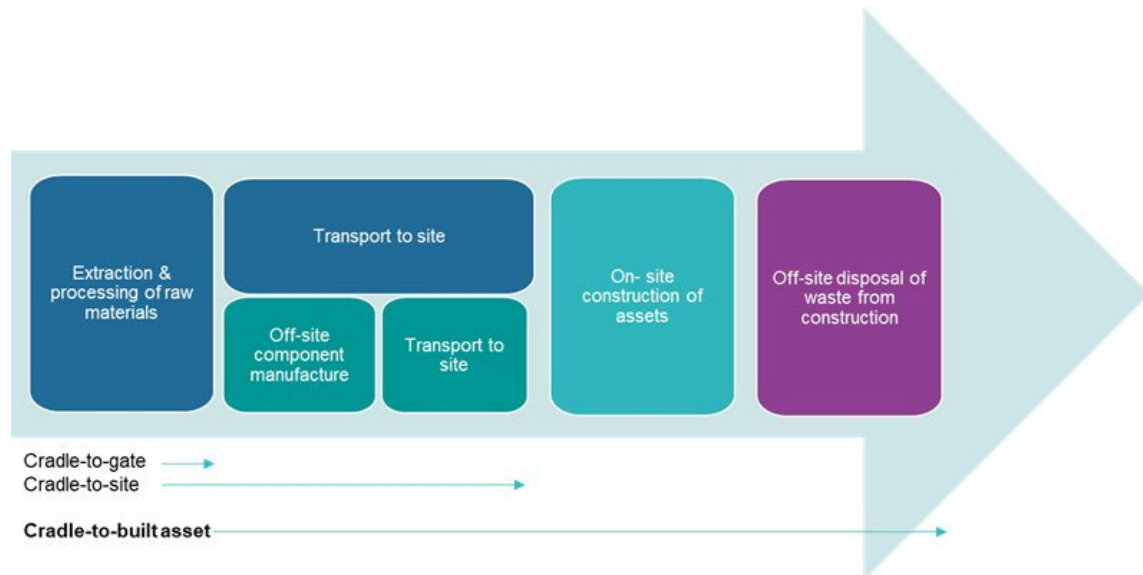
Measurement of the performance commitment against baseline estimates developed at the point of project development enables a more accurate performance improvement target to be applied at the point of best known information. This protects customers, as targets set upfront on an absolute basis as part of the 5 year price review cycle are unlikely to be as accurate.

The company will hold their supply chain to rigorous standards on environmental performance including pollution and waste management. They will work closely with suppliers to ensure there are no unintended environmental consequences of prioritising a reduction in embedded emissions.

The scope of PC will influence both material changes and construction techniques, including:

- Material selection and sourcing
- Solution selection
- Manufacture and construction processes
- Design optimisation and engineering
- Supply chain transportation
- Construction and commissioning techniques

Figure 2: Equipment and unit rate model inputs



Projects delivering improvements to physical assets included within the definition include but are not limited to:

- Mechanical and process equipment such as pumps, valves and treatment processes
- Electrical equipment such as motors, drives and MCCs
- Civil infrastructure such as buildings, storage structures and mains

Additional detail on measurement units

All estimations of emissions will be calculated in Tonnes of CO₂e (TCO₂e).

Specific exclusions

Only new build capital delivery projects will be included in the calculation of this performance commitment. To allow sufficient scope to deliver tangible benefits, projects will only be considered above a Capex value of £500,000 based on the Latest Best Estimate at Gateway 1. With a subset of projects included in the definition, the company will clearly report on which projects are included/excluded and the rationale and how it complies with this definition in its annual report.

For clarity, the following activities will be excluded:

- Operational maintenance
- Minor works
- Reactive maintenance
- Estates and Facilities
- IT

Reporting and assurance

The company shall ensure that its outcome delivery incentive payments only relate to real performance changes and not definitional, methodological or data changes in performance commitments. The company will be transparent in its reporting.

To ensure incentives through action rather than reporting or grid decarbonisation, emissions figures used will be estimated using the emissions factors from 2021-22. This aligns with the Performance Commitment for Operational GHG Emissions (Water). If new products become available which offer an improved embedded emissions value but have not been assigned a 2021-22 emissions factor then the PC will use the earliest available emissions factor.

All emissions estimations will be carried by an internal team independent from the Capital Delivery function and will follow the guidance set out in PAS2080. Estimations and reporting will be subject to third party assurance.

For reporting, the percentage change in embedded GHG emissions will be recorded in the reporting year which the Gateway 4 is passed for each specific project. As a result, projects will only contribute change to the metric in a single reporting year.

Baselining of projects will begin in 2025-26 for all relevant projects passing through Gateway 1 in the year, with the first changes to be reported in 2026-27.

For all projects passing Gateway 4 in a given reporting year, the baseline and actual figures will be respectively summed and a percentage change from baseline calculated. The calculation will be as below:

$$\text{Percentage reduction in Embedded GHG Emissions} = \frac{\sum \text{TCO2e at Gateway 1} - \sum \text{TCO2e at Gateway 4}}{\sum \text{TCO2e at Gateway 1}} \times 100$$

The company will work with other companies with similar bespoke performance commitments through industry working groups to enable the sharing of learning across

the sector, supply chain and other stakeholders. Case studies, project outcomes and learnings will be published as part of the Annual Report and incorporated into the company's Open Data strategy.

Table 1 Definition parameters

Parameters	
Measurement unit and decimal places	Percentage reduction in embedded GHG emissions to two decimal places
Measurement timing	Reporting year
Incentive form	Revenue
Incentive type	Underperformance and outperformance
Timing of underperformance and outperformance payments	In-period
Price control allocation	15% water resources, 85% water network plus
Frequency of reporting	Annual
Any other relevant information	N/A
Links to relevant external	N/A