

OGCS New Sustainability Minimum KPI's

Here we suggest an initial set of minimum KPI's for contracts of a value in excess of £500,000. Data to be reported annually and based on consumption, rather than initial contract outlay.

All KPI's are for the service consumed by the contracting department, agency or body and NOT for the company reporting. For example, e-waste from delivering the hosting services consumed in 2022 by the contracting department.

Colocation Service Providers:

- Total Energy Consumption and Renewable Energy Factor (REF), which is the percentage of a renewable energy of the total data centre energy as per ISO/IEC 30134-3
- Power Usage Effectiveness (PUE), which is the ratio of total facility energy consumption by the IT equipment energy usage as per ISO/IEC 30134-2
- Total CO₂e Emissions and Carbon Usage Effectiveness (CUE), which is the ratio of the total CO₂e emissions (in kg) [caused by the total data centre energy consumption] by the IT equipment energy usage in kWh
- Total Water Usage and Water Usage Effectiveness (WUE), which is the ratio of the annual site water usage in litres by the IT equipment energy usage in kWh
- Energy Reuse Factor (ERF), which is the ratio of energy being reused divided by the sum of all energy consumed
- e-waste sent to landfill in tonnes (trailing 12 months)

IaaS/PaaS/SaaS Providers:

- Total CO₂e Emissions – for Scope 1 and 2 as per the GHG Protocol
- Total Energy Consumption – for Scope 1 and 2 as per the GHG Protocol
- Total Water Usage
- e-waste sent to landfill in tonnes (trailing 12 months)
- Energy consumption per Business Useful Transaction (BUTe) (trailing 12 months)
- Carbon emissions per Business Useful Transaction (BUTc) (trailing 12 months)

What constitutes a business useful transaction will vary depending on the service provided. For example, in the case of an IaaS provider delivering VM hosting services, this would be the average amount of energy consumed by a VM over 12 months. For storage services, it would be the amount of energy consumed per TB over 12 months, and so on. Some providers calculate this by dividing the total energy consumed (or CO₂e emissions) by the number of business useful transactions over the same 12-month period. Service providers will have to describe

the methodology (and scope) used to calculate BUTc and BUTe. These KPIs are not to be used to compare two different providers as there are many attributes such as security, interoperability, reliability, etc. that would impact overall energy consumption and emissions. These KPIs are meant to help track efficiency performance over time for the same provider.

A forward look to increasing our minimum standards and KPI's

Inclusion of GHG Scope 3 in the calculation of relevant KPIs.