



Energy Benchmarking

What is... Benchmarking?

Benchmarking is a method of comparing energy consumption for a site or group of sites against published figures for comparable buildings.

This process allows the rapid identification of sites which appear to have excessively high energy use allowing the worst performing sites to be quickly targeted for action and, if appropriate, further analysis and correction.

“Benchmarking energy consumption provides a rapid indication of sites which need closer investigation”

How Does It Work?

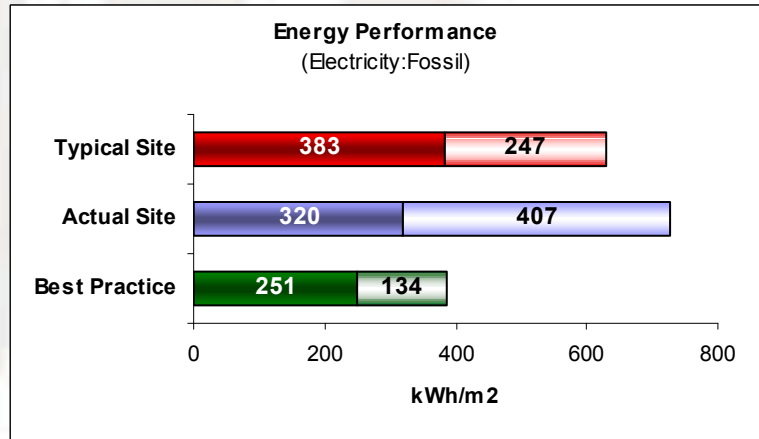
The benchmark process takes the energy consumption for a building, normally over a 12 month period, and through a process of normalisation, produces energy consumption details in kWh/m² for both electricity and fossil fuel (gas and oil).

These consumption figures can then be compared to other similar sites within a clients estate and just as importantly against Typical and Best Practice figures for comparable buildings.

Factors taken into account include floor area, hours of occupation, type of accommodation, location and annual temperature.

It is important to ensure that benchmark figures used for comparison purposes are relevant to the site. This is particularly relevant where a site may have a mixed function and it becomes necessary to tailor benchmarks accordingly.

Example Reporting



Example Energy Performance for a problem site shown against Typical and Best Practice Benchmarks.

The graph shown above is taken from an actual report for a building based in Central London. The electrical consumption is shown to be well below that expected of a Typical site, whilst the fossil fuel consumption can be seen to be well in excess of comparable benchmarks.

Further investigation at this site has since revealed significant amounts of lagging missing to pipe work and valves in the boiler room. Also the large boiler plant was being run during summer periods for the production of small quantities of hot water.

Further reductions in electrical and fossil fuel consumption are expected as other projects are instigated at the site.

Analysing the performance of buildings and benchmarking against comparable sites provides a rapid indication of the sites which need to be targeted for further investigation.

Contact us for more details on how Watt-Knots can assist you in benchmarking your buildings and reducing your total energy consumption.