



# CARBON BITES

From the CIBSE ENERGY PERFORMANCE GROUP

## Transparent sustainability: WELL standard & Energy Cost Metric

Sustainability standards have played a key role in encouraging more sustainable building practices and have helped to make decisions regarding sustainability more transparent. There are a wide variety of different sustainability standards and approaches that can be adopted, which can have very different focuses. The Well Standard and the Energy Cost Metric are two such examples of very different approaches to assessing and facilitating sustainable building design and operation.

### Well Standard

In contrast to other sustainability standards the Well Standard does not have a focus on energy use. Instead, the Well Standard focuses on the health and wellbeing of building occupants and provides a certified framework by which to assess these qualities. The standard has modules focusing on “Air”, “Water”, “Nourishment”, “Light”, “Fitness”, “Comfort” and “Mind”. A key feature of the standard is that many of the criteria require rigorous post-completion testing, and periodic re-certification is required for a building to maintain its certification. Another key distinction between the Well Standard and other building sustainability certifications is that the user fit-out and the organisation’s practices are also considered by the standard. This means that in order to achieve Well certification, the organisation commissioning the building as well as the design/construction team needs to be fully involved in the process.

### Energy Cost Metric

The Energy Cost Metric is a new approach to sustainable building developed by Cambridge University Engineering Department. The Energy Cost Metric aims to drive design towards cost effective energy savings through a quantified approach to both cost and lifetime energy. The quantified approach sits alongside some wider principles relating to the pleasantness, flexibility and measurability of the building, although it does not test wider aspects of sustainability or the comfort/wellbeing of the building users directly. The metric enables comparison of different aspects of the design to help identify where spending can be most effectively focused in order to achieve the biggest energy savings per pound spent. This means that the metric leads to pragmatic decisions about where to best spend money on reducing the building’s lifetime energy consumption. As a new metric, there is still a degree of development to be undertaken and further testing on live projects is required. So far, the Energy Cost Metric has been used on the master plan for the re-location of Cambridge University’s Engineering Department and on the first building to move to the new site.

Katie Doig, Max Fordham, 22/07/17

### Key Issues

- Different design standards can take very different approaches to sustainability
- The Well Standard has a focus on occupant health and wellbeing
- The Energy Cost Metric focuses on cost effective energy saving
- How should different aspects of sustainable design be prioritised with respect to others?

### LINKS

- <https://www.wellcertified.com/>
- <https://uk.linkedin.com/in/tom-spurrier-3549382https://sites.google.com/view/energycostmetric/home>
- <http://www.maxfordham.com/people/joel-gustafsson>

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