

Workplaces of the Future – The Changing Landscape of Sustainability Accreditations

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As the UK strives towards net zero, we talk to Derwent London's Senior Sustainability Manager, Samantha Carlsson and Digital and Innovation Manager, Michael Simons to find out how Derwent is measuring sustainability today – and what to expect tomorrow.



The big picture and whole-building metrics

“Tools such as BREEAM or LEED are useful for planning and implementing sustainability at design and construction stages, and relatively easy for occupiers to understand,” says Carlsson. “But they can lose their value if treated as tick-boxes. To avoid this, we ensure that we’re fully integrating the outcomes of studies and progressing the learning within our buildings.”

Carlsson points out that industry-led initiative UK Net Zero Standard, due to launch in summer 2024, will soon create another set of goals. “Essentially it will introduce a new embodied carbon target, as well as other metrics, which the other standards don’t really have,” explains Carlsson. “We think it’s going to bring about big changes including a common reporting framework for what it means when talking about a ‘net zero carbon’ building. It formalises what industry leaders are already doing and will help occupiers and shareholders to compare different buildings or portfolios.”

Opposite: 80 Charlotte Street W1

The rise of NABERS and WELL, meanwhile, can be seen as evidence of a shift towards performance-based standards, with NABERS in particular focusing on operational energy. As a member of the Better Buildings Partnership, explains Carlsson, Derwent were early advocates for the adoption of NABERS in the UK, providing funding and taking part in the steering group who advised on adaptations for its 2020 UK launch.



Opposite: 25 Baker St. W1

New roles for technology

With the shift in focus towards operational energy and performance, technology plays an increasingly central role in sustainability – whether that’s through informing the infrastructure of buildings or measuring them in use. Simons explains that while WiredScore has been around for a decade, SmartScore is a newer metric that provides clarity on what defines a smart building, as well as proof of the value that adds.

“WiredScore is the backbone – the infrastructure of internet, data and mobile connections, and how resilience is built in. SmartScore is more about how that technology is harnessed to improve user experience and wellbeing – things like thermal and acoustic comfort, air quality and accessibility. It focuses on the outcomes that the building user actually wants, as a result of real conversations between tenants, owners and technologists.”

Opposite: The Featherstone Building EC1





A key aspect of smart buildings is the collection of data through sensors, leading to important decisions about how that data is best processed and how tenants can best access it. “A layperson would most likely be bamboozled by WiredScore data,” observes Simons. “In contrast SmartScore data is user-friendly, covering things like the software for occupancy tracking, reporting and cleaning schedules – the interfaces between buildings and people.”

Although both certifications are reassessed on an annual basis, Simons explains that embedding the principles into the design brief is fundamental to smarter buildings – as evidenced by Derwent’s achievement of the world’s first Platinum WiredScore building and the first Platinum SmartScore retrofit for White Collar Factory.

Case Study: The Featherstone Building

“The Featherstone Building is our most intelligent building yet – it sets a blueprint for the future,” says Simons of the 124,000 sq ft building at the heart of London’s tech hub.

Designed by architects, Morris+Company, and completed in 2022, The Featherstone Building achieves Platinum SmartScore and WiredScore certifications as well as BREEAM Outstanding and LEED Platinum. It has an EPC rating of A and is WELL enabled.



The Featherstone Building EC1

“With a digital design brief in place we were able to prepare from the ground up all the infrastructure needed for SmartScore and to support WELL fit outs,” says Simons.

He flags Derwent’s ongoing collaboration with one of the building’s first tenants – integrated consulting engineers Buro Happold. “We collect data via our smart building systems and anonymise it through Derwent’s API [Application Programme Interface],” explains Simons. “We then share it with Buro Happold so that they can monitor energy performance. It’s a groundbreaking level of tenant-landlord collaboration, with the goal of driving down energy consumption for all occupiers”.

“It’s a groundbreaking level of tenant-landlord collaboration.”

Michael Simons

“It’s a real-time change. Buildings collecting data isn’t new – but smart buildings are bringing that data right into the here and now in accessible formats, creating feedback loops that are completely circular.”

Advantages include greater control of tenant experience, comfort and operational energy while avoiding waste. “It also means we can quickly identify and mitigate against any issues, so maintenance can be preventative rather than reactive”, adds Carlsson.



Opposite:
The Featherstone Building EC1 - Reception

The future

And how do Carlsson and Simons see the landscape of sustainability accreditations for workplaces evolving in the future?

Carlsson believes the focus on building performance will grow. “We’re already seeing that with NABERS and its emphasis on energy in use. Of course, it’s important to get it right from the beginning – and the accreditations and standards that benchmark design and construction from an embodied carbon point of view will continue to be vital. But we also have to keep getting it right every day after completion.” Close analysis of operational energy and continual embodied carbon measurement of maintenance and repair as well as continual assessment of occupant wellbeing will, she predicts, soon be the norm.

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Samantha Carlsson

For Simons, smart building metrics provide a benchmark to build on. “Up to now tech has been a bit behind in relation to the ESG and sustainability agendas in our industry – but it’s catching up fast. As part of the advisory council for SmartScore, Derwent is a strong advocate for more integrated and human-centred measurement in workplace buildings, because that’s where we believe things are heading.”

Both Carlsson and Simons predict more sharing of knowledge and data around sustainability in the future. “We’re used to sharing learning with tenants in our Green Forums,” says Carlsson. “But now the feedback is increasingly two-way and we’re also seeing more occupier-to-occupier knowledge sharing. We’re all aiming for the same environmental goals. When we work together, we get there quicker”.

At a glance

– BREEAM

A holistic sustainability metric launched in 1990 and the world's longest established method of assessing, rating and certifying the sustainability of buildings.

– LEED

Certification programme developed by the US Green Building Council in 1998 and now used worldwide. LEED provides a framework for the design and construction of green buildings with a focus on energy modelling.

– WELL

A wellbeing focused standard launched in the US in 2013 to promote health leadership. Designed for integration with HR policies, measurement is structured around seven factors influencing occupant health and wellbeing – air, water, nourishment, light, fitness, comfort, and mind.

– NABERS

Sustainability rating system with an emphasis on building performance. Originating in 1998 in Australia, the tool assesses operational energy over a 12-month period, with certifications awarded annually on a scale of 1 to 6 stars. NABERS UK was launched in 2020 and is now administered by CIBSE.

– WiredScore

A digital connectivity certification launched in the US in 2013. Awarded annually, the score rates the quality and resilience of a building's digital infrastructure, ensuring its capacity to keep pace with future technological advancement. Platinum, Gold, Silver and Certified levels.

– SmartScore

Billed as the global standard for smart buildings, SmartScore helps offices deliver and maintain high levels of user experience while reducing environmental impact. Based on the two pillars of User Functionality and Technological Foundations, certification is scored on nine factors. There are five levels of certification from Pre-Certified to Platinum.