

Schneider Electric helps Landsec create flagship Net Zero building in London's cultural hub of Bankside

3 years ago



Landsec has announced that The Forge, Landsec's first net zero carbon (NZC) commercial development is to feature smart energy management solutions from <u>Schneider Electric</u>.

Landsec and Schneider have worked closely from the early concept stages of this first-of-its-kind development, which is set to complete at the end of 2022 and is aligned with Landsec's commitment to become a net zero carbon business and reduce absolute carbon emissions by 70% by 2030.

A Smart Approach to Net Zero

The Forge, a London development in the cultural hub of Bankside, comprises two new-build commercial office buildings of nine storeys each, Bronze and Phosphor, which together provide circa 140,000 sq ft of net internal space.

The Forge aspires to be the first commercial office development constructed and operated in line with the UKGBC's net zero carbon buildings framework. It is also the first office scheme to be built using the highly sustainable platform approach to design for manufacture and assembly (P-DfMA). Schneider Electric has contributed to promoting the offsite construction process, which included producing package units for the Building Management System controls. The project will benefit from the full breadth of Schneider Electric's EcoStruxure[™] for Buildings to enable smart building and energy management solutions, including:

- EcoStruxure[™] Building Operation:Offering enhanced control for facilities managers, optimising building management operations
- EcoStruxure[™] Power Monitoring Expert: Designed to help maximise uptime and operational



efficiency, giving insight into electrical system health and energy consumption

- EcoStruxure[™] Power Advisor and EcoStruxure[™] Building Advisor:Providing relevant data for actionable insights by constantly monitoring systems and identifying faults to proactively address a building's inefficiencies
- Low-voltage and Medium-voltage Smart Products and Components:Allowing for the full monitoring of energy usage and real-time infrastructure status updates

"Access to Schneider Electric's expertise and innovation early in the design process has undoubtedly helped to support our net zero ambitions for this project," said Neil Pennell, Head of Design Innovation and Property Solutions at Landsec. "The breadth of the offering will enable us to enhance the occupant experience, operational efficiency, and sustainability credentials of the buildings, which will adapt to the changes in climate and use over time minimising whole life carbon. It is essential that new builds continue to meet climate-related targets at the operational stage, which is why Schneider's smart building solutions are so critical."

"The Forge is proof that net zero buildings are possible. Landsec is creating buildings of the future, today. A key element of this is taking intelligent technologies and leveraging the power of smart, clean, and digital electricity – something we call Electricity 4.0 – right from the start," said Kas Mohammed, VP Digital Energy at Schneider Electric UK & Ireland. "With many companies rapidly running out of time when it comes to net zero targets, I hope the work done by Landsec will provide an inspiration and a path forward for many who are uncertain of where to start."

The Forge has been selected by Innovate UK, part of UK Research and Innovation, as a demonstrator project for the Transforming Construction Challenge initiative, in recognition of its pioneering design and ground-breaking construction techniques, which have contributed to a circa 25% reduction, to date, in embodied carbon from the initial design stage.

Schneider Electric's cutting-edge technology will also help the buildings meet Landsec's Design for Performance (DfP) target. The in-use energy rating is derived using an industry-backed initiative that aims to close the performance gap by establishing a method for ensuring new office complexes meet their predicted design performance level, during the operational phase. The full suite of EcoStruxure[™] dashboards will help Landsec to monitor progress against their NZC roadmap and to obtain their targeted <u>5* NABERS UK rating</u>.

Image credit: Schneider Electric