

INNOVATION

Creating a sustainable
Workplace of the Future

JLL, Singapore

Discover how EcoStruxure™ Building, a cloud-based building management platform, increases operational excellence and maximizes energy efficiency at JLL's new headquarters.

se.com/ww/en/work/campaign/buildings-of-the-future

Life Is On

Schneider
Electric



Without having to flip a light switch, the smart lights turn on when someone enters a room. The temperature and air conditions in the office are automatically kept at an optimum level all day. Data is continuously gathered from sensors around the office and used to make decisions that drive employee comfort, wellbeing, and efficiency.

Powered by Schneider Electric solutions, JLL's new Singapore office is its first to use smart IoT technologies in its pursuit of creating the workplace of the future. A strong advocate in using technology to create human-centric workplaces, 30% of JLL's building/furnishing budget went into implementing these technological solutions.

The global pandemic has changed the way people work, live and play. More organisations are adopting remote working arrangements, while people are meeting, socialising and eating less outside of the home. This has created an unprecedented challenge for the real estate sector and as a Fortune 500 corporation in the sector, this shift in how people inhabit buildings has not only affected Jones Lang LaSalle Incorporated's (JLL) clients but its employees as well.

Darren Battle, Head of Corporate Real Estate and Workplace, Asia Pacific at JLL said, "The new Singapore office is a testament to our desire to combine technology, design and innovation to drive employee wellbeing. This employee-centric approach allows us to raise productivity and showcases JLL's expertise in building workplaces of the future."

Improving Employee Wellbeing with Technology

With over 50 years of history in Asia Pacific and 45,000 employees across the region, it was important for JLL to ensure that its employees would resume work in offices that enhanced staff health and productivity.

With that in mind, JLL worked to ensure that its new Singapore office would not only deliver the best human experience possible but also maintain operational excellence and manage costs better. It would also serve as both a pilot and a showcase for the other offices in the globe and its customers.

Believing that impromptu discussions and meetings among staff encourages more creativity and innovation in the workplace, JLL sought to bring 555 of its 755 employees in Singapore together under a single roof.

With operations spread across four offices, the challenge was to integrate the multiple systems within the four offices into its new Paya Lebar office.

Goal

- Deliver best human experience
- Maintain operational excellence
- Optimise cost management

Story

Accommodating 555 of their 755 employees into a single HQ that does not compromise on delivering the best human experience, while ensuring operational excellence.

Solution

Apps, Analytics & Services:

- EcoStruxure Building Advisor

Edge Control:

- EcoStruxure Building Operation
- Energy Expert

Connected Products:

- Automation Server
- KNX Lighting Control System
- SE 8000 Room Controller
- PowerLogic Tag

Results

- Optimal light, temperature, air quality levels within the new JLL Singapore office
- Reduced carbon footprint through increased energy efficiency
- Singapore office is the third-highest scoring Asia Pacific location on the company's human experience index
- JLL has seen a 30% decrease in energy consumption and operational costs.

The solution would come in the form of Schneider Electric's EcoStruxure Building – a single, centralised platform that would manage all the facility's systems. The nature of EcoStruxure Building's modular design ensures that the JLL office will be futureproof and allows for JLL to scale up the solution if need be.

A part of EcoStruxure platform, EcoStruxure Building Operation is an IoT solution that utilises an open and secure integration framework. With EcoStruxure Building Operation, data between Schneider Electric and third-party energy, lighting, HVAC, fire safety, security, and workplace management systems in JLL's new office can be exchanged seamlessly. This allows for collaboration across JLL's various third-party systems to create innovative custom solutions, and for new technology expansions to be deployed easily.

JLL's facility manager can then leverage EcoStruxure Building Advisor, a suite of analytic monitoring services, to keep an eye on the different systems and equipment within the two JLL office floors. All this can be accessed from a single dashboard, with remote access capability as well. The data is monitored daily and can be used to identify and track areas for optimisation, as well as verify the ROI on improvements. Issues are resolved before they become a problem, allowing the company to move from a reactive to a predictive approach.

85 sensors around the JLL office actively track energy consumption, air quality, and temperature. Some are Schneider Electric's PowerTag wireless energy sensors, which are a scalable offering that can be easily installed on existing or new panel boards. The PowerTag sensors can monitor energy consumption in real time and help JLL achieve the company's energy conservation objectives.

Through the data gathered from the PowerTag sensors, JLL's facility manager can compare the energy usage across specific periods to reduce energy consumption, optimise energy efficiency and accurately allocate costs.

The sensors also offer the facility manager a bird's eye view of the system so he can monitor the condition of the office's electrical equipment. With the data gathered by the sensors, he can determine if it is time to perform condition-based maintenance, which is maintenance that is performed before the equipment fails or performs below a certain level. The facility manager will also be able to respond promptly should there be any power-related issues, for example, he will receive alarms should an overload tripping threat present itself.



Seamless User Experience & Engagement

Lighting and air quality are essential to having a comfortable and productive office environment. Poor lighting and air quality will lead to reduced productivity as occupants experience health and comfort issues.

With Schneider Electric's automated lighting, employee comfort is always at an optimum level as users will never have to touch a light switch. The smart lighting system ensures JLL employees are always exposed to the ideal amount of light, so they are comfortable and productive.

Smart lightning also helps to conserve energy and reduce costs as the lights are off when not in use, extending their lifespan. The smart lighting solution not only benefits JLL's employees, but also the company's bottom line and sustainability efforts.

The office also employs a Smart Heating, ventilation, and air conditioning (HVAC) system that leverages Schneider Electric's sensors and IoT solutions to optimise air conditions and office temperature.

The sensors within the office and Schneider Electric's SE8000 room controllers detect air quality, temperature, humidity, and occupancy levels. With the SE8000's thermostat-like design and user-friendly interface, employees can easily check the room or office's temperature, humidity, and CO₂ levels.

Improving Productivity and the Bottom Line

In a rapidly changing office environment that is being shaped by the pandemic, the workplace of the future emphasizes the employee.

By focusing on employee health and comfort, the new JLL Singapore office is now the third-highest scoring Asia Pacific location on the company's human experience index.

By incorporating Schneider Electric's technology and solutions to improve employee and visitor experience as well as comfort, JLL has also managed to hit its two other objectives as the company has seen a 30% decrease in energy consumption and operational costs.



"A smart office starts with a smart system designed to help the office operator measure and manage their energy usage and office wellness conditions. We at Automated Lifestyle are proud to have worked with Schneider Electric at every step of the way to bring JLL a complete smart office solution." said Esther Wong, Director, at Automated Lifestyle, Light & Room Control EcoXpert Partner.

"We believe that delivering the best human experience in the office space, is absolutely key to our operational excellence. That is why we work with partners like Schneider Electric and Automated Lifestyle to design our ideal work space where technology and human experience comes together."

- Darren Battle,

Head of Corporate Real Estate and Workplace,

JLL Asia Pacific

EcoStruxure™ for Building



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Innovation At Every Level

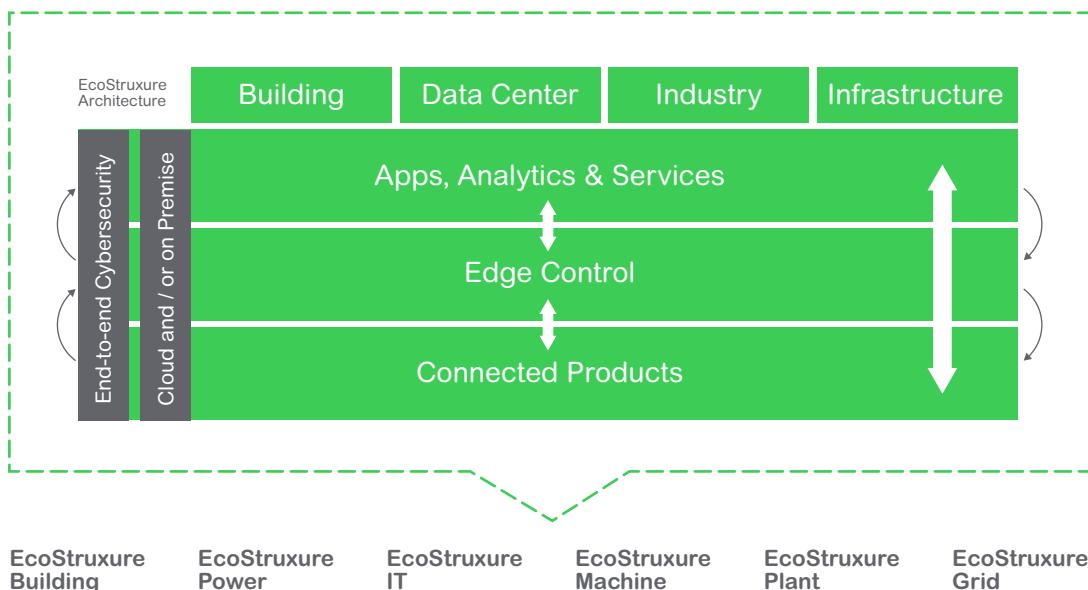
IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric's open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure™ has been deployed in 480,000+ sites, with the support of 45,000+ system integrators and developers, connecting over 1.6 million assets under management through 40+ digital services.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure

se.com/sg/en/work/campaign/innovation/overview

Learn More



Discover EcoStruxure



Discover EcoStruxure Building



Unlock building value with
EcoStruxure Building Advisor



Know more about
EcoStruxure Building Operation



Explore EcoStruxure for
Commercial Real Estate Solutions



Contact us to start your journey

Schneider Electric Singapore

50 Kallang Avenue, Singapore 339505

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