

Our Smart Building Journey



KALLNG PULSE

Schneider Electric East Asia
& Japan HQ

Achievements

- **Schneider Electric**

saved an estimated 122,000 kWh of electricity and 3,700 m³ of water per year from 2018 to 2020

Achievements

- Awarded BCA Green Mark Platinum (Version 2021) building
- Awarded Leadership in Sustainability & Performance by SGBC-BCA (2019)
- Increased brand recognition and improved on CSR

Total Gross Floor Area

18,500 m²



Software and Analytics

[Building Advisor](#), [Power Advisor](#), [Resource Advisor](#), [Asset Advisor Power](#), [Asset Advisor IT](#), [Workplace Advisor](#), [MicroGrid Advisor](#), [Augmented Operator Advisor](#)

Edge Control

[Power Monitoring Expert](#), [EcoStruxure Building Operation](#), [Security Expert](#), [Facility Expert](#)

IoT-enabled Connected Products

- Over 5000 Connected Products
- Power Logic, Power Tag, MTZ
 - BTU, Water Meter, AHU, Chiller Plant (data exchange with BCA Portal through Web Services)
 - Motion Sensors, CO2 Sensors, Env Sensors, lighting control KNX/Dali Full LEG Lights, UPS, InRow, CCTV, Access Control
 - Conext Solar/ Battery Monitoring / Battery Energy Storage Solution (BESS)
 - Elink(Kone lift), Data exchange with offsite solar energy retailers

Life Is On

Schneider
Electric

Renewable energy usage

- More than 10 solar panels on car park rooftops and in the gardens
- Electric Vehicle charger stations powered by solar energy
- Landscape lightings and koi pond are powered by harvested solar energy on site
- Battery Energy Storage System (BESS) to store conserved solar energy for nighttime use



Inhouse Green & CSR Committee & Education Portal

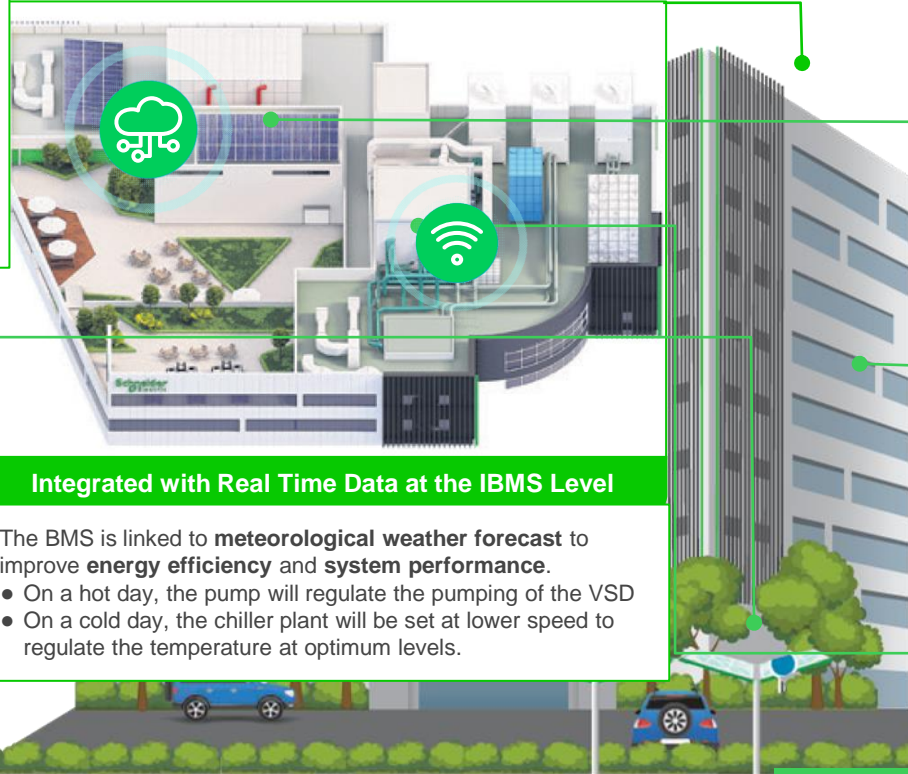
Sustainable initiatives, waste management, no single use plastic, energy saving, biodiversity, Carbon Neutral, Renewable Energy, etc.



EV Chargers & Electric Service Fleets



Smart Rooftop



80 Solar Panels on the Rooftop

The building runs on 100% renewable (solar) energy in the day time (9.30am to 4.30pm). Accompanied with offsite solar energy, this accounts for 47% of the building's monthly energy consumption (220Mwh).

Window Panels

The design of the building facade and windows panels meet the Envelope Thermal Transfer Value (ETTV) to enhance energy performance

Magnetic Bearing Chiller with VSD

A chiller plant also acts as a centralised cooling system, providing a portion of air conditioning in the building's HVAC systems. The magnetic bearing chiller with VSD regulates the speed according to the demand. This helps to achieve higher efficiency rating.

Integrated with Real Time Data at the IBMS Level

The BMS is linked to **meteorological weather forecast** to improve **energy efficiency** and **system performance**.

- On a hot day, the pump will regulate the pumping of the VSD
- On a cold day, the chiller plant will be set at lower speed to regulate the temperature at optimum levels.

Life Is On

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Electric

Smart Ground Floor



KALLANG PULSE

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& Japan HQ

Building Age

25 years

Total Gross Floor Area

18,500 m²

Objective

achieve **100% CO₂ neutrality** by 2020



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