

Two Taikoo Place, Hong Kong



Client

Swire Properties

Location

Quarry Bay, Hong Kong

Key services provided

Develop Neuron Smart Building Platform for a Grade A office

BRIEF

Two Taikoo Place continues our commitment to the future with a triple Grade A rated property that is set to be one of the most sought-after addresses in the city. The office tower has been built to the highest sustainability standards, achieving Pre-certified Platinum ratings for LEED, WELL and BEAM Plus.

As part of its sustainability and digital strategy, this building has implemented a new digital platform developed by Arup & Neuron with the vision to enhance its building sustainability and efficiency and, provides useful insight to building operation through latest technologies in data analysis.

DESIGN APPROACH AND IMPLEMENTATION

Neuron has been appointed to provide the smart building consultancy services as well as implement the digital platform to enable BIM Asset Management (AM), big data analysis and, Artificial Intelligence (AI) model development for energy saving and predictive maintenance. This digital platform is based on Arup & Neuron with customization possible in functional design and AI model development, shaping Two Taikoo Place as the first AI controlled building in Hong Kong.

SCOPE OF WORKS

- Neuron IoT Hub
- Building Insight Analytic Dashboards
- 3D Digital Twin
- BIM + AM Integration
- Machine Learning assisted Chiller Plant optimization
- Energy management and monitoring
- System alarm and operation suggestion
- Data-driven operation approach
- Building insight analytics dashboards
- Smart Toilet
- BIM mobile application with AR

HOW WILL WE APPLY THESE TO THIS PROJECT?

The platform is scalable that it is possible to be expanded geographically and introduced as a cutting-edge tool for users to optimize production cost, minimize energy usage, and effectively manage building assets. The application scenario of Neuron is not limited to buildings, but also includes infrastructures and smart campus.