

Industry Practitioners Category

Construction Manager

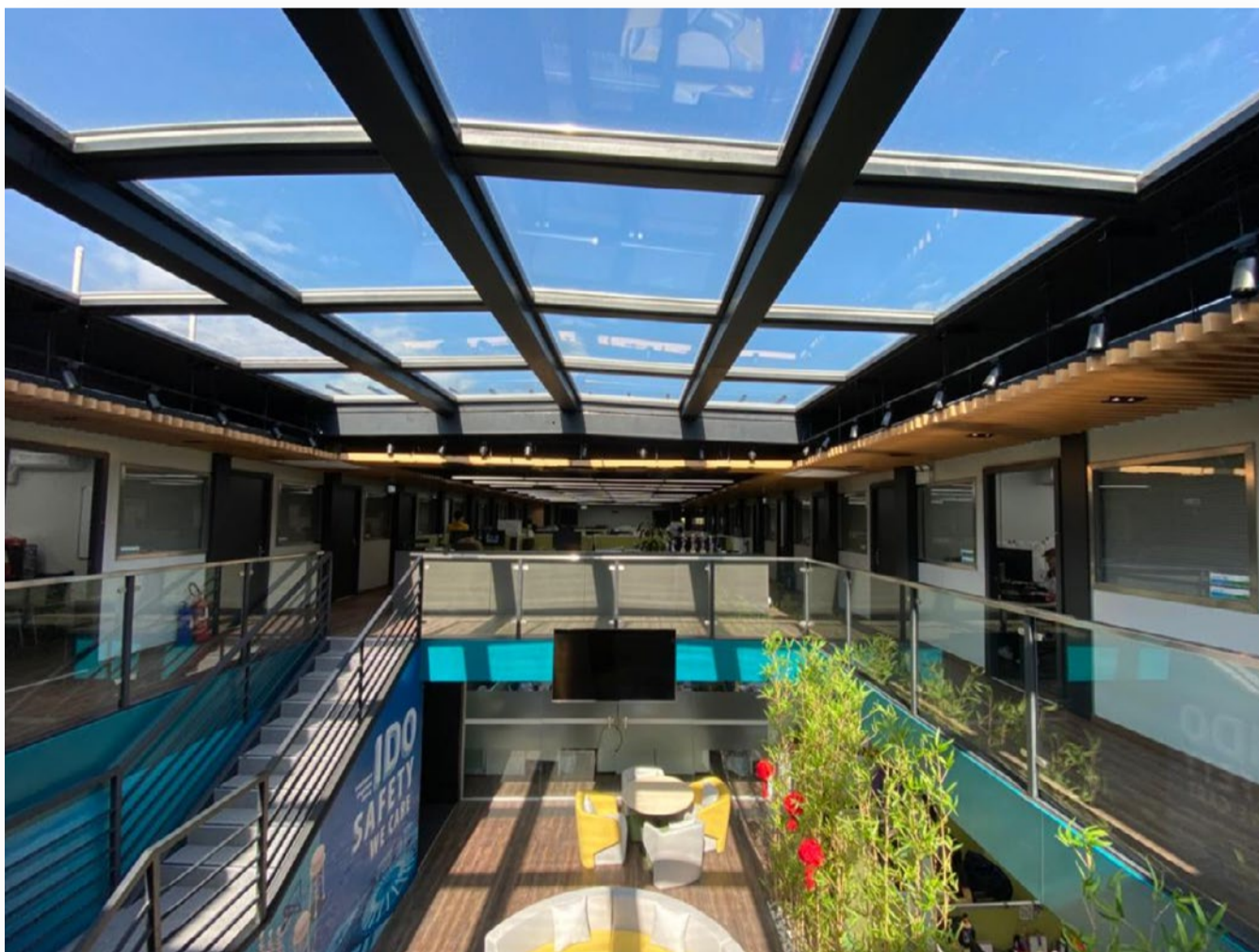
Outstanding Award

YAU Ming-hong



In-situ Reprovisioning of Sha Tin Water Treatment Works (South Works) – Water Treatment Works and Ancillary Facilities

The South Works of Sha Tin Water Treatment Works commissioned in 1964 is now undergoing the substantial in-situ reprovisioning works for replacing the aged facilities and uprating the treatment capacity. Sustainable resources and innovative technologies including the renewable energy generation, digitalisation, and AI safety monitoring system have been applied widely in the project. The innovative construction greatly mitigates possible environmental nuisance, streamline workflows, improve resource efficiency, and also demonstrates our commitment to the environmental responsibility.



Sustainable Best Practice 1

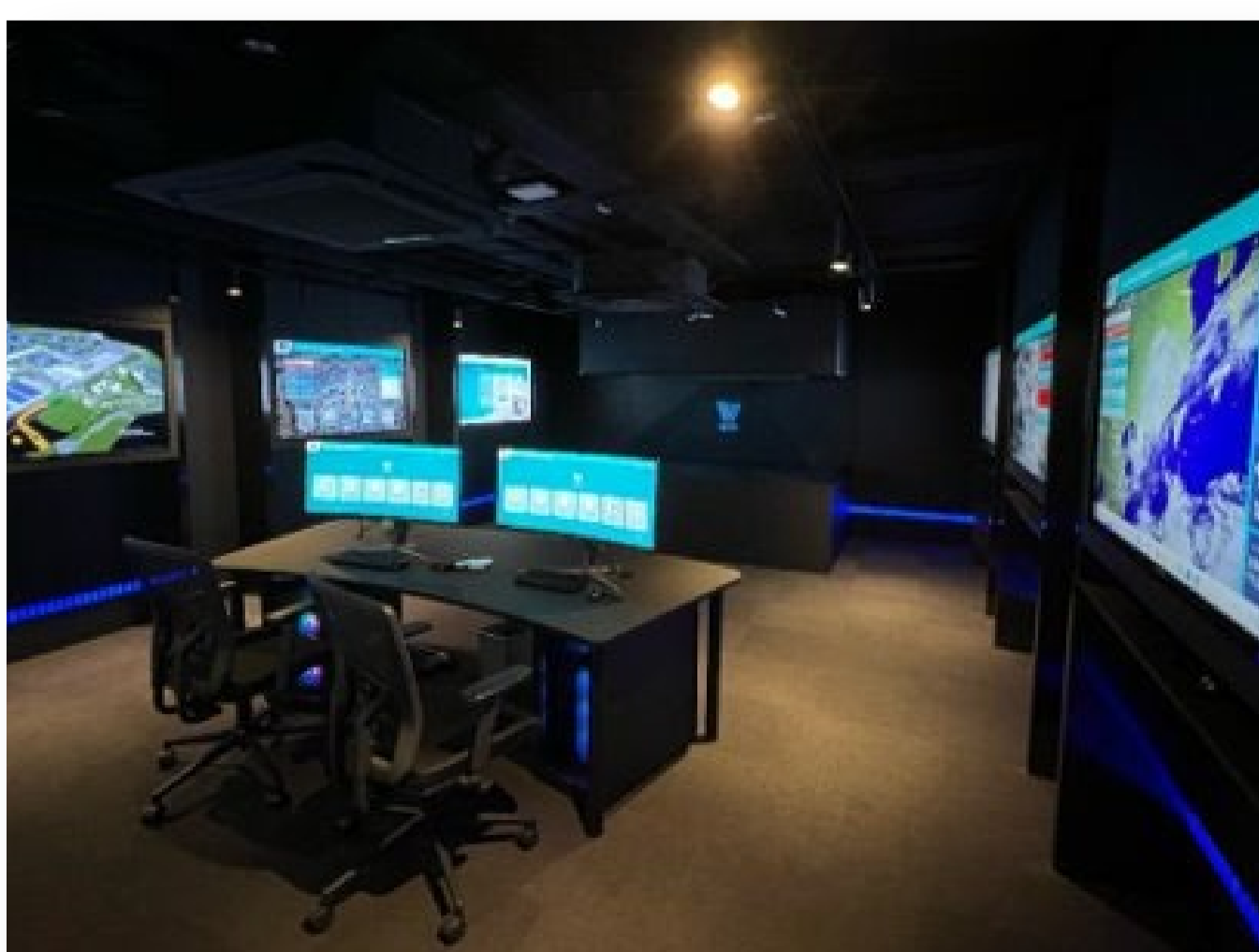
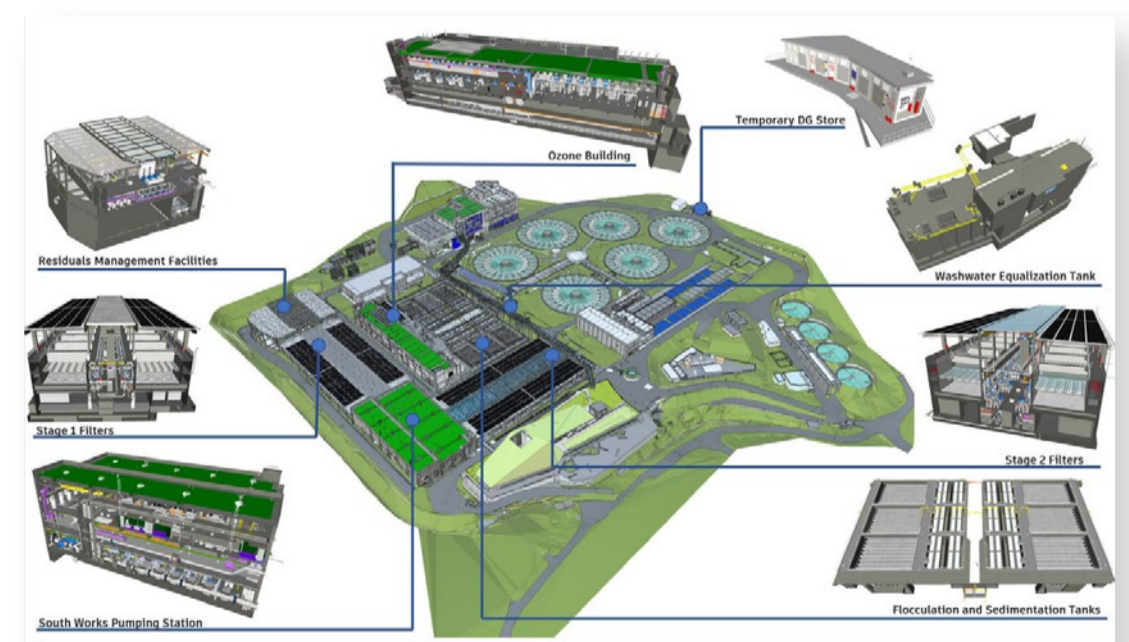
Renewable Energy Generation

- Implement sustainable policies by advance use of solar PV panels in future designs to generate electricity for site offices.
- Integrate skylights into the design to utilise natural lighting and reduce energy consumption.
- Collaborate with suppliers to procure high-quality PV panels, ensuring the proper installation and maintenance.

Sustainable Best Practice 2

Digitalisation

- Utilise Building Information Modelling (BIM) in project designs to improve efficiency and accuracy.
- Adopt Digital Works Supervision System (DWSS) for site management enhancing collaboration and reducing reliance on paper-based communication.
- Promote paperless meetings and submissions by utilising digital documentation and electronic workflows.



Sustainable Best Practice 3

AI Environmental Monitoring System

- Advocate the adoption of AI environmental monitoring systems for real-time monitoring and immediate notification of environmental parameters.
- Collaborate with the project team to select appropriate monitoring locations and install the AI monitoring system on site.
- Immediate actions in response to alerts from the AI system and coordinate with relevant stakeholders for efficient issue resolution when necessary.