

Industry Practitioners Category

General Practitioner

Outstanding Award

YIP Yun-lam



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 upgrading 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 mitigate possible environmental nuisance, streamline workflows, improve resource efficiency, and also demonstrates our commitment to the environmental responsibility.



Sustainable Best Practice 1

Renewable Energy Generation

- Conduct market research to identify and procure environmental monitoring devices that utilise solar energy for power.
- Implement solar powered monitoring systems to support sustainable energy usage on the project site.
- Regularly monitor and maintain the solar-powered systems to ensure their proper functioning and optimise renewable energy generation.

Sustainable Best Practice 2

Digitalisation

- Educate subcontractors on the use of digital communication platforms for efficient and streamlined information exchange.
- Equip meeting rooms with projectors and digital displays to facilitate digital presentations and discussions.
- Encourage the use of digital documentation and reporting to minimise paper usage and promote sustainability.



Sustainable Best Practice 3

AI Environmental Monitoring System

- Install AI-based environmental monitoring systems to monitor various parameters such as air quality, noise levels, and dust emissions on site.
- Determine appropriate monitoring locations in consultation with experts and regulatory requirements.
- Implement additional measures, such as automatic water spray systems, based on AI monitoring data to mitigate environmental impacts effectively.