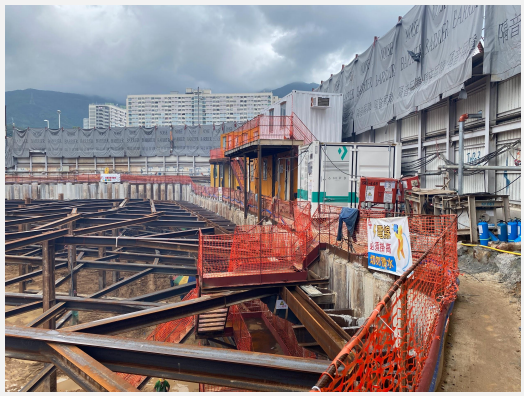
Zero Emission Energy for Urbanisation

Case Study: Kai Tak 1E1

Introduction & Project Information

- **Main Contractor:** Tysan Holdings Limited
- **Project location:** Kai Tak, Hong Kong
- **Project type:** Foundation of Residential Development
- **Developer:** Hong Kong Housing Society
- **Delivery date:** 19 April 2022
- **Loads:** 3 welding machines, 1 semi-auto welding machine, 1 water pump, 8 spotlights, cctv
- **Enertainer Model:** Enertainer F
- **Input current to the Enertainer:** ~ 25-30 amps



Site Setup

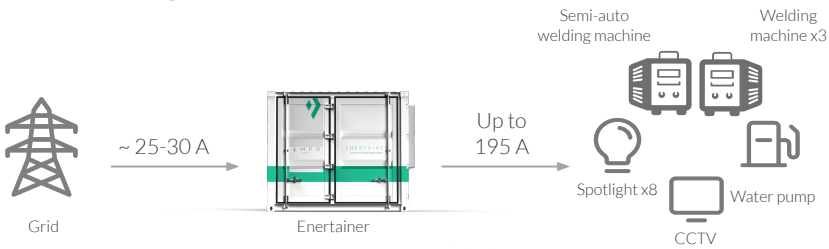
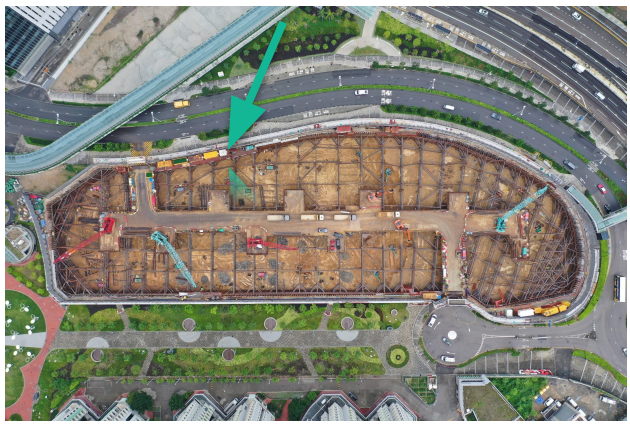


Figure 1. 'Block' diagram of the connection between the utility, Enertainer and the loads.



Results

- 82% lower operating cost[1] (vs. 200 kVA generators)
- 75% CO_2 reduction[2] (vs. 200 kVA generators)
- Highest current measured: 170 amps
- Zero on-site air pollutant, improve workers health

"Tysan is always open to adopting innovative technologies, to promote both carbon reduction and site operation optimization. Ampd Enertainer is one of these technologies. It is ideal for ELS works, with significantly less carbon emission and less noise than diesel generators. Its online platform "Enernet" is imperative in optimizing a smart construction site for us. Not only did it allows us to remotely monitor the system at anytime, but it also helped us track carbon savings of our site work."

Mr. Stephen Lam, Senior Project Manager,
Tysan Foundation Limited

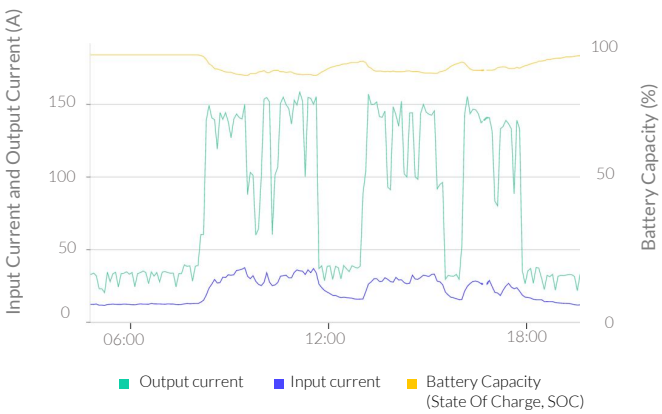


Figure 2. Performance metrics for the Enertainer on 22 Sep 2022

[1] Assuming a diesel price of HK$11.0 per litre.
[2] Assuming a CO_2 emission intensity of 0.39 kg per kWh (Source: CLP Sustainability Report 2021)