Case Study: Multi-welfare Services Complex

An Emission-free Future for Construction

Introduction & Project Information

- **Main Contractor**: SOCAM Development
- **Project Location:** Kwu Tung, Hong Kong
- **Project Type**: Modular Integrated Construction (MiC)
- **Project Manager:** HK Architectural Services Department (ASD), HK Development Bureau
- **Delivery Date**: 16 Oct 2020
- **Supported Equipment**: 4 Tower cranes
- **Enertainer Model**: Enertainer L
- **Input Current to the Enertainer**: ~43 amps

Site Setup

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

Results

- Savings of HKD854,000/yr on diesel fuel cost[2]
- 495,865 kg annual carbon reduction
- 61% CO_2 reduction[1,2]
- Zero on-site air pollution, , better for workers' health

"This is the first project where we're using modular integrated construction technology in full application. Kwu Tung is in a rural area so power supply is limited, but the Enertainer solved this problem. It also helps reduce the impacts we have on the surrounding community and improve the productivity of our operations. The detailed data provided by the Enernet allowed us to monitor all 4 Enertainers real-time. We're really happy with the Enertainer. This is the future of construction, we must make it sustainable and data-driven."

Mr. Adrian Lo, Head of Corporate Development
SOCAM Development

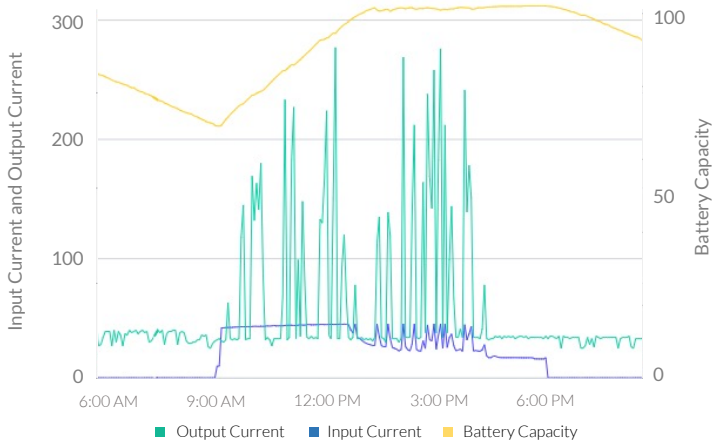

Figure 2. Performance metrics for the Enertainer on July 9 2021

[1] Average carbon intensity of electricity is 0.37 kgCO_2 per kWh (Source: CLP Sustainability Report 2020)
[2] 4 x Enertainer L replacing 4 x 500 kVA Diesel Generators)