

## CASE STUDY

# Zero-Emission Power for Central Harbourfront

Central Harbourfront, Hong Kong



## Introduction & Project Information

- **Main Contractor:** China Overseas Building Construction Limited
- **Project Location:** Central, Hong Kong
- **Project Type:** Commercial Development
- **Developer:** Pacific Gate Development Limited
- **Loads:** 3 x 50t Tower Crane
- **Enertainer Model:** 1 x Enertainer L+ (purchase) / 2 x Enertainer L (Rental)
- **Input current to the Enertainer:** 19A each

## Site Setup

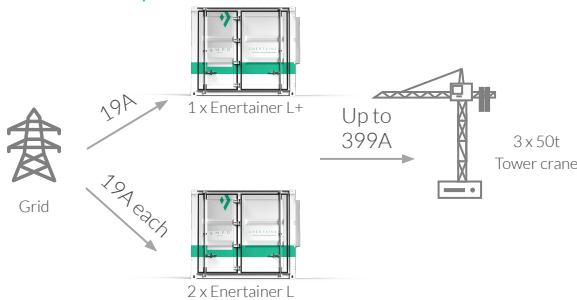


Figure 1. 'Block' diagram of the connection between the utility, Enertainer and the loads.

"As the specialist contractor for the New Central Harbourfront development, we commit to integrate innovative technology which can enhance both efficiency and sustainability. The Ampd Enertainer energy storage system is a step towards realizing these principles – providing a reliable and efficient power source that eliminates the challenges of diesel generators. Its quiet operation significantly reduces noise pollution, creating a better working environment, while helping to abate nearly a million tonnes of CO<sub>2</sub> emissions.

We let the Enertainer's state of charge drop through the week, knowing it will fully recharge over the weekend when operations pause. This strategy allows us to maintain a low charging current (19A) while ensuring it continues to meet the site's demands. By adopting the Enertainer, we are not only improving operational performance but also reinforcing our commitment to a greener, more sustainable construction."

Franky Lo, Project Director, Goldwave Steel Structure Engineering Ltd

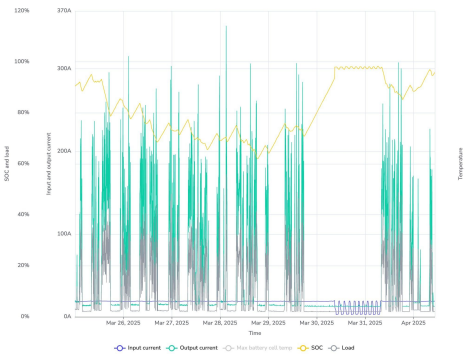


Figure 2. Enertainer performance metrics from 25 Mar - 1 April 2025

## Results

- **68% operating cost<sup>1</sup>** (vs. 3 x 500 kVA Diesel Generator)
- **945k tonnes CO<sub>2</sub> and 408k litres diesel reduction<sup>2,3</sup>** (vs. 3 x 500 kVA Diesel Generator)

<sup>1</sup> Assuming a diesel price of HKD\$7 per litre and electricity price at HKD\$1.56 per kWh.

<sup>2</sup> From Jul 2024 to 26 Feb 2025.

<sup>3</sup> Assuming a diesel emission intensity of 2.64 kg<sub>CO<sub>2</sub>e</sub> per litre and electricity emissions intensity of 0.66 kg<sub>CO<sub>2</sub>e</sub> per kWh. (Source: HKE Sustainability report 2023, p.6)

