



# Organisations Category Contractor in New Works

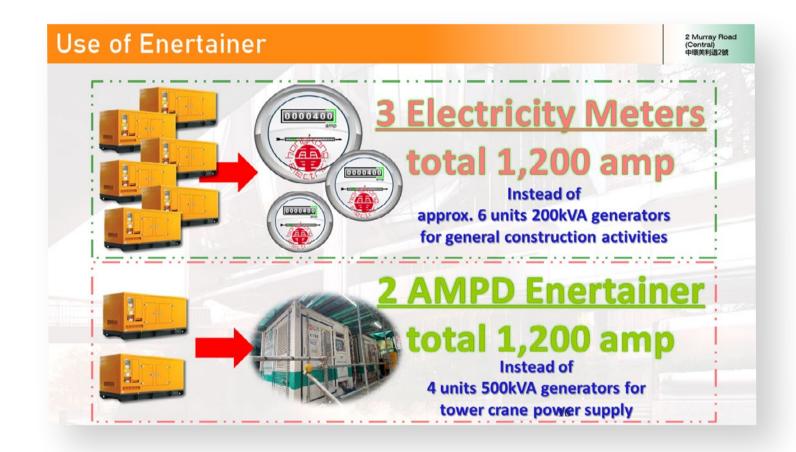
## **Merit Award**

### Hip Hing Construction Co. Ltd.



#### The Henderson

The Henderson is a 36-storey commercial development which feature 25 office floors alongside amenities such as carpark, SkyGarden-cum-Refuge Floor, Fine Dining & Banquet Hall at towertop. During construction, no diesel generators were used and these were replaced by two Enertainer energy systems, which have proven to reduce air pollutants and carbon emissions by around 65% and 99% respectively. 3R Principles (Reduce, reuse and recycle) were incorporated into waste management at The Henderson. The construction waste recycling rate achieved 80% up to May 2023.



#### **Sustainable Best Practice 1**

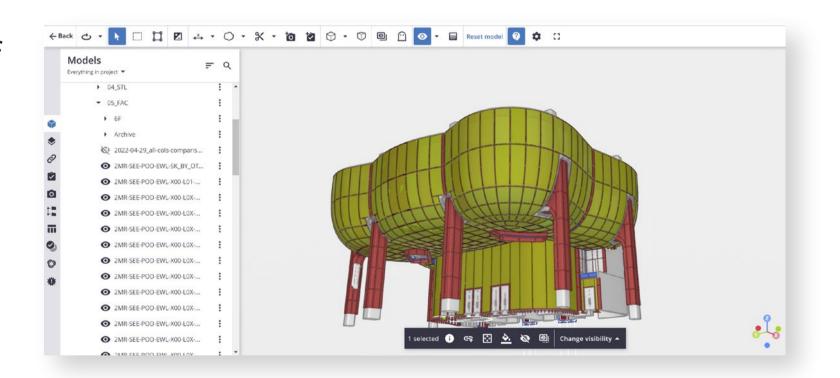
Two Enertainer battery-based energy systems were deployed as the sole power supply for The Henderson, eliminating the need for traditional diesel-based generators. They significantly reduced the direct combustion of fossil fuels on site, lowered the noise level and reduced other pollutants such as CO, NOx, SO2 and more. Mini wind turbines were also deployed on-site and converted expelled air from the ventilation fans into electricity, turning what would otherwise be pure waste into useful energy.

#### **Sustainable Best Practice 2**

Using BIM technology, Hip Hing was able to create a detailed digital model of The Henderson's distinctive façade design that incorporated information on the materials, dimensions and performance requirements

of each component. BIM also ensured that the façade produced was able to meet rigorous standards of quality and performance.

BIM was adopted to derive accurate quantity takeoffs and material tracking. When this information is integrated with project schedules, it becomes possible to optimise resource utilisation and reduce material waste.





#### **Sustainable Best Practice 3**

Hip Hing's Design for Manufacturing and Assembly (DfMA) Extension project utilised precast concrete components for efficient and accurate construction of The Henderson's façade.

Over 70% of the inclined curve curtain wall's precast façade curb in The Henderson was modularised for efficiency and uniformity. This resulted in significantly improved quality and a 30% reduction in construction time for this phase of the project, which helped Hip Hing stay on track for the project timeline without affecting the build quality.