



Green House Gas (GHG) Emission Reduction



ENERGY STORAGE SYSTEM
CITF PRE-APPROVED NO.
PA23-059

智能櫃

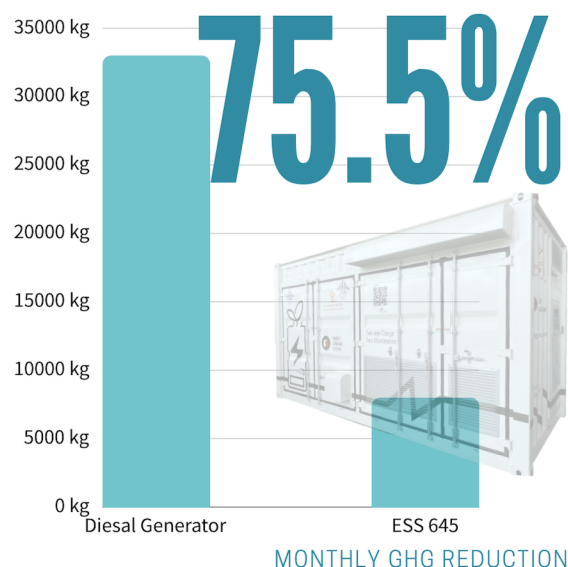
GREEN CONSTRUCTION
CARBON REDUCTION



RGT-ESS-645

MAIN FEATURES

- Reduce Reliance on Diesel Generators by Recharging from a Grid.
- Support for Various Construction Equipment which needed Non-stop Power Supply, including Tower Cranes, Passenger / Material Hoists, Welding etc.
- Real-time Performance Monitoring and Notification Ensure Seamless Operation.



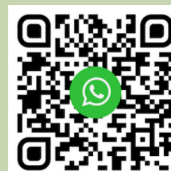
- Significant Payback (< 1 year with CITF)
- Flexible Charging Option (Grid & Generator)
- Capable for High Output Spike
- Customized Design to Fit the Actual Application
- Customized Capacity to Suit Specific Operation Needs



REC GREEN
Technologies Co., Ltd.
盈電環保科技有限公司

REC's Engineering Team provides the technical advice from application design, changeover and maintenance.

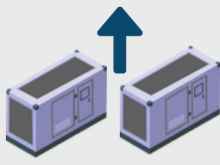
For inquiries on how to apply the Energy Storage System in your project, please contact us.



CASE STUDY of RGT's ENERGY STORAGE SYSTEM (ESS-645)



2 Buildings + 2 Tower Cranes

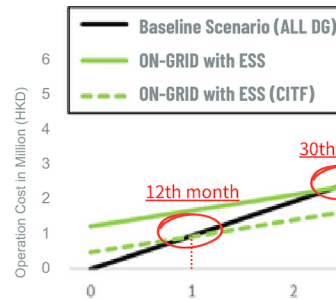


Bio-Diesel
Generator x 2 nos.



RGT-ESS-645 x 1 no.

Purchase Payback of 1 nos. ESS



	Monthly Rental Bio-Diesel Generator x 2 nos.	Purchase RGT-ESS-645 x 1 no.
Energy Source	Biodiesel	Electricity from Grid
Average Monthly Usage	12,810 L #	22,463 kWh *
Average Monthly Energy Cost	HKD 85,827 #	HKD 33,694 * ↓60.8%
Monthly Carbon Emission	33.8 Tonne CO ² e ##	8.3 Tonne CO ² e ** ↓75.5%
Nuisance	Noise (65-85 dB during operation) Air Pollution (PM2.5, NOx, SO ₂)	None
Remote Monitoring	Not Available	Built-in Monitoring System

Energy Cost: 12,810 L x HKD 6.7/L = HKD 85,827

Carbon Emission: 12,810 L x 2.64kg/L = 33.8 Tonne CO²e

* Energy Cost: 22,463 kWh x HKD 1.5/kWh = HKD 33,694

** Carbon Emission: 22,463 kWh x 0.37kg/kWh = 8.3 tonne CO²e

PRODUCT SPECIFICATIONS

PARAMETER	RGT-ESS-215	RGT-ESS-344	RGT-ESS-645 (CITF No. PA23-059)	RGT-ESS-1290
Power/Energy Storage	100kVA / 215kWh	250kVA / 344 kWh	500kVA / 645kWh	1,000kVA / 1,290kWh
Maximum Output (Three-phase)	Peak (<1 min) : 222 A (10 mins) : 177 A Continuous : 158 A	Peak (<1 min) : 555 A (10 mins) : 444 A Continuous : 397 A	Peak (<1 min) : 1,191 A (10 mins) : 952 A Continuous : 794 A	Peak (<1 min) : 3,000 A (10 mins) : 2,400 A Continuous : 2,000A
Energy Storage Subsystem Chemistry	Lithium-ion LFP			
Fire Security	Built-in Fire Protection System; Perfluorohexanone is Used for Halon Fire Extinguishing System.			
Major Standard Compliance	<ul style="list-style-type: none"> GB 51048 - Design Code for Electrochemical Energy Storage Station GB/T 36276 - Lithium-ion Battery for Electrical Energy Storage GB/T 34210- Test Method for Determining the Orientation of Sapphire Single Crystal GB/T 34131- Technical Standard for Battery Management System of Electrochemical Energy Storage Station GB/T 34133- Testing Code for Power Converter of Electrochemical Energy Storage System 			
Data Transparency	Web-based Battery Monitoring System Support IEC61850, Modbus, IEC60870-5, DNP			
Net Weight (tonne)	2 tonne	10 tonne	13 tonne	22 tonne
Dimension (L x W x H) (mm)	1,000 x 1,300 x 2,250	2,991 x 2,438 x 2,896	3,100 x 2,438 x 2,896	9,000 x 2,438 x 2,896