



STATE ENTERPRISE "NATIONAL INFRASTRUCTURE PROJECTS"



Ukraine Energy Storage Solutions



JJE Industries & H&W International



Capability and Capacity Overview

• Projects



The international market continues to expand

The Partners combined have successfully delivered a number of domestic and foreign electrochemical energy storage projects, the application include: peak-load shifting, emergency power backup, integrated solar + storage + charging station, capacity expansion, power quality management and renewable energy power generation.

5

Continents

22+

Countries

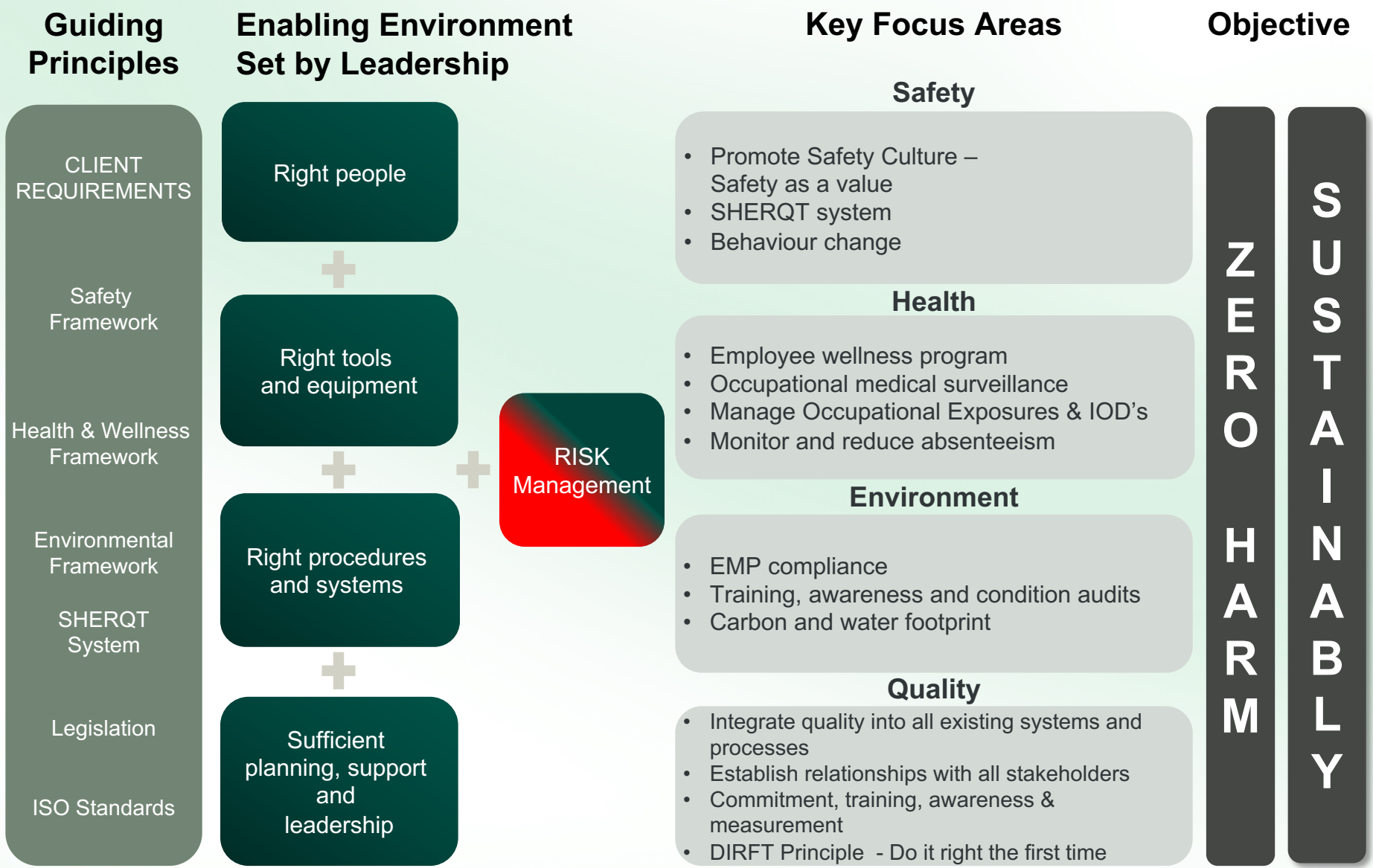
700MWh+

Capacity



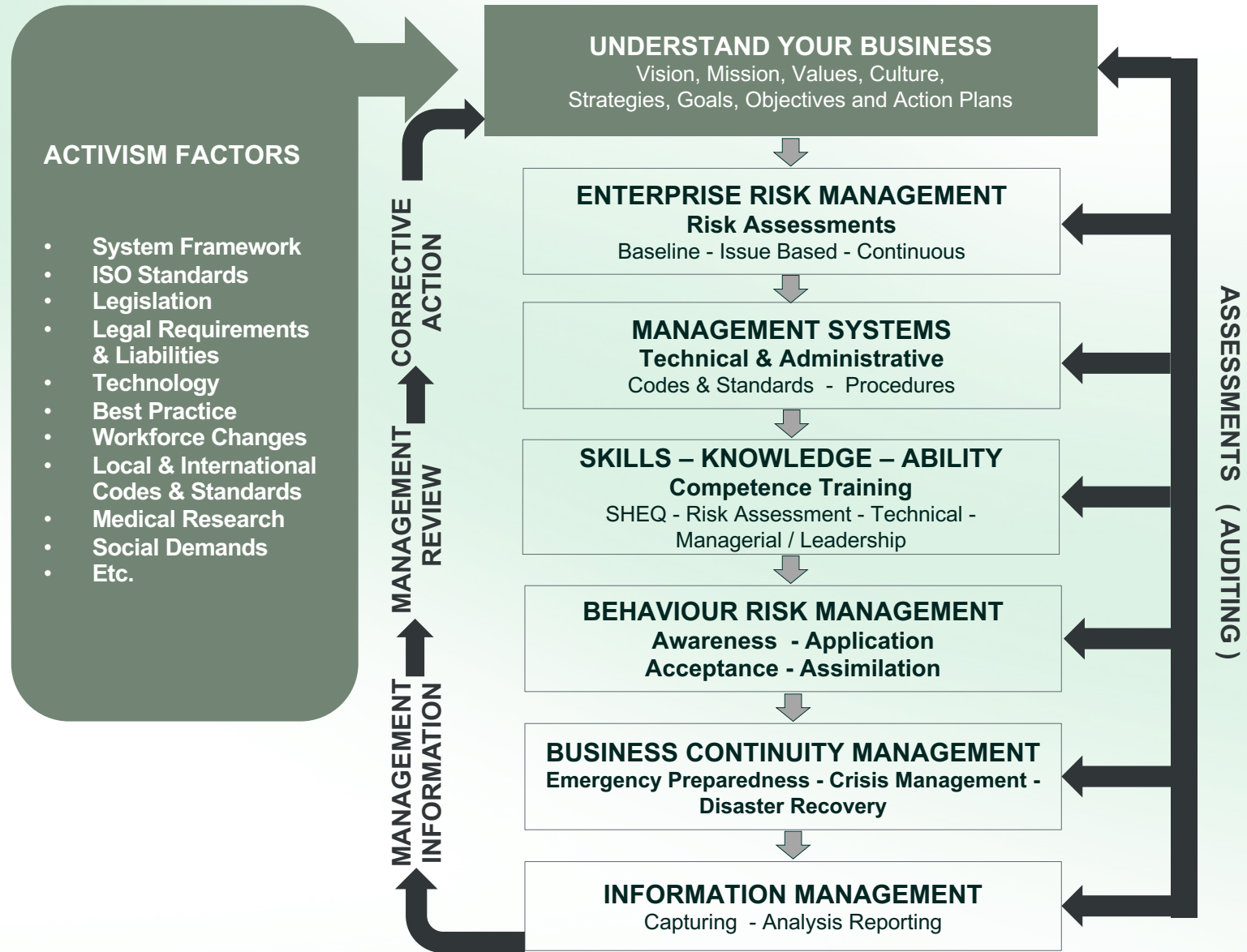


Management System Framework (1)



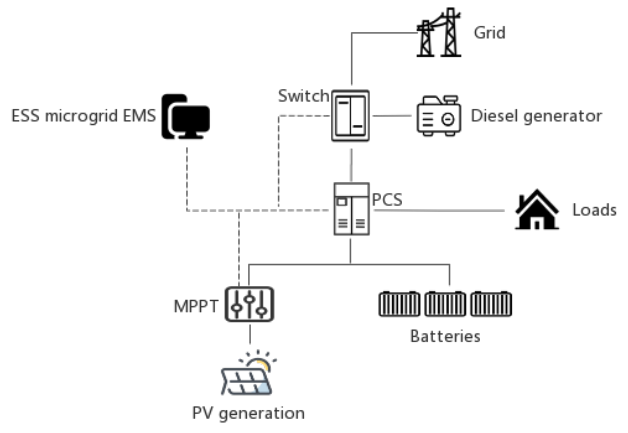
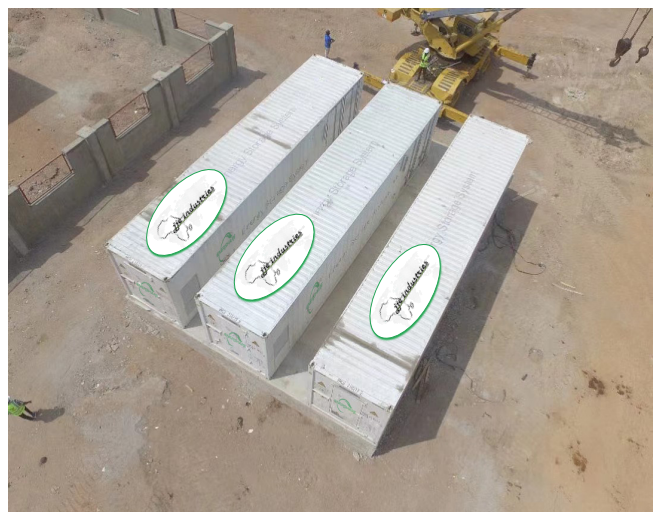
RISK Management

Management System Framework (2)





• Some recently completed projects



Nigeria farm energy storage project



250kW/3MWh containerized integrated solar + storage microgrid solution

Delivery date: Dec, 2021

Application:

Provide automatic uninterruptible power supply for the farm, save electricity costs and promote green production.

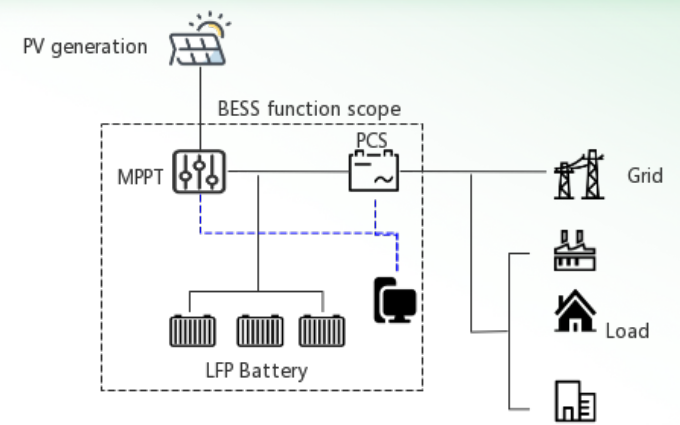
• Some recently completed projects

Japan regional microgrid project

2.88MW/7.296MWh, including 6 sets of the 480kW/1216kWh Containerized BESS(EnerCube)

Delivery date: Jan, 2023

Application: Integrated 3.5MW solar system. In the on-grid mode, the system participates in the regulation of electricity market, including peak-load shifting and virtual grid application. In the off-grid mode, it will build a smart microgrid to supply power for the microgrid region, so as to solve the power-off of users in the region.



• Some recently completed projects



Dominica

500kW/1MWh containerized BESS EnerCube1.0

Delivery date: Nov, 2021

Application: Integrated solar+ storage microgrid system is suitable for access of diesel generator and supports the switching of the utility grid and on-grid/off-grid within 10ms.



Guangdong Province, China

40ft 500kW/1MWh containerized BESS EnerCube1.0

Delivery date: April, 2023

Application: Integrated solar+ storage+charging system to improve solar utilization efficiency. Saving electricity and getting benefits from the peak-load shifting.



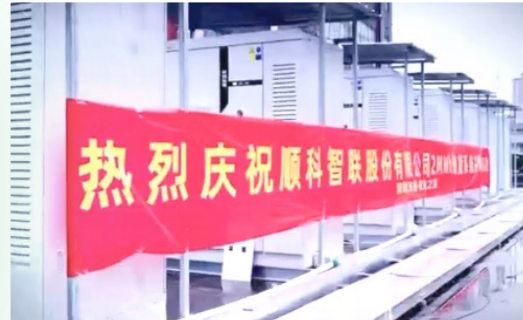
Germany

20ft 240kW/688kWh containerized BESS EnerCube2.0

Delivery date: April, 2023

Application: Integrated solar+ storage+diesel generator system, and EMS intelligently deploy each power generation unit. Using the local TOU tariff policy to achieve income.

• Some recently completed projects



Industrial Park Peak-load shifting Application Case

960kW/2.016MWh Integrated Outdoor Battery Energy Storage Cabinet

Delivery date: Nov, 2022

Application: Help the industrial park to achieve peak-load shifting and save electricity, and effectively adjust the electricity consumption curve through the charge and discharge process of energy storage system.



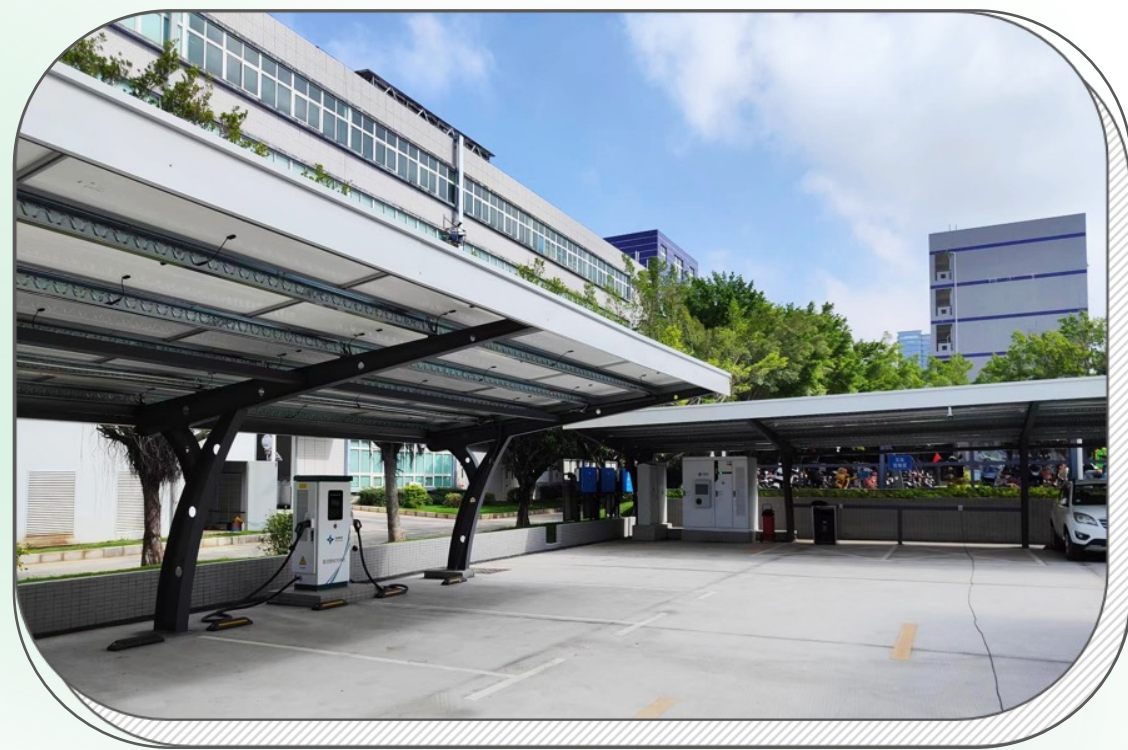
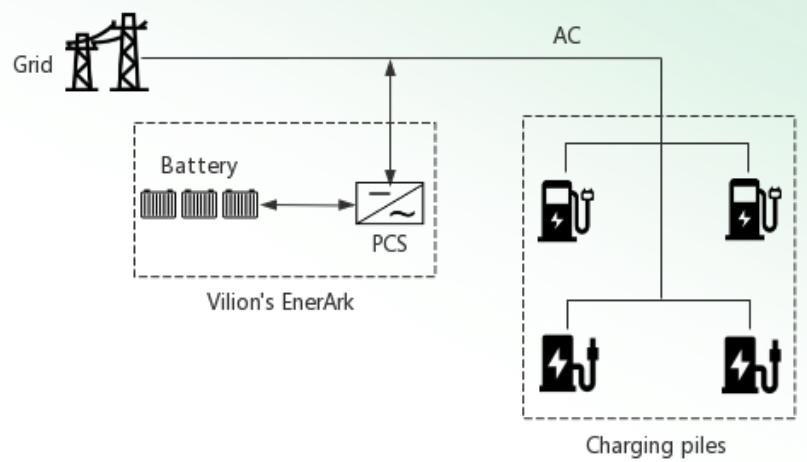
• Some recently completed projects

Shenzhen Industrial Park Storage + Charging Integration Project

30kW/100kWh EnerArk1.0

Delivery date: Nov, 2022

Application: Industrial park storage+charging system to realize the peak-valley energy transfer and save electricity costs.



• Some recently completed projects



1. UK House Solar +Storage Case

Product: 30kW/168kWh EnerArk 1.1

Delivery date: Nov, 2022

Application: The ESS provides reliable backup power for the house and effectively help families to get significant benefits from the local TOU tariff.

2. Australian Solar + Storage Project

Product: 5 sets of 30kW/100kWh EnerArk 1.1

Delivery date: Dec, 2022

Application: AC coupled with the local PV system. With the on-grid working mode, this ESS will smooth the power output of the PV system, storage the excess PV power generation and promote green production.



1-UK



2-Australia

Cumulative shipments of EnerArk exceed 13MWh (by the middle of 2023)

• Some recently completed projects



Shenzhen, China

Intelligent Energy Management System

EMS+ViVewer, 72x1.2MWh Energy management + intelligent digital operation and maintenance

Delivery date: Nov, 2021

Application: Intelligent and fine energy management of energy storage assets in dozens of industrial parks and helps the industrial enterprises to reduce power costs, save investment in capacity expansion and operate energy storage assets efficiently and safely.



• Some recently completed projects



Indoor Energy Storage Case in France

30kW/67kWh integrated indoor battery energy storage cabinet

Delivery date: July, 2022

Application: Emergency power backup to provide continuous and reliable power supply for users.

Mobile Solar + Storage Power System in Australia

30kW/130kWh integrated outdoor battery energy storage cabinet

Delivery date: April, 2023

Application: Providing convenient and clean power supply for the mining area and promoting green production.



DIESEL GENERATOR (Back-Up)

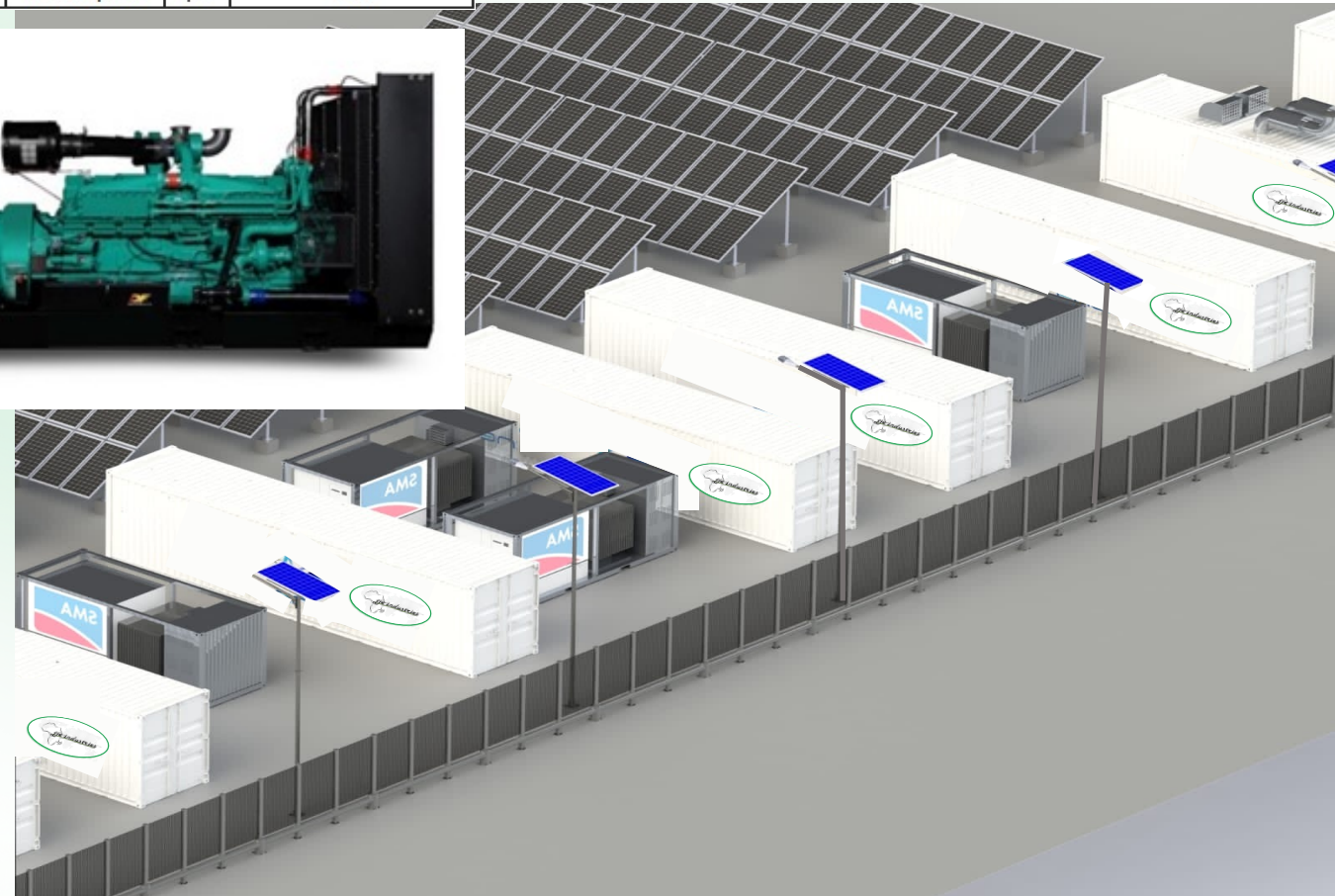
2 generators of 2250KVA equal to a generation of 4,5MVA can be installed to assist and act as backup power generation in scenarios when the PV and grid generation is unavailable or being fixed.

Automatic switchover will be installed to ensure zero stoppage and continuous supply of electrical demand.

Controller



MODEL		LSIC3000S3	
Power Pf.0.8	Standby	kVA	3000
		kW	2400
	Prime	kVA	2750
		kW	2200
	Frequency	Hz	50
	Voltage	V	230/400
Rated speed	rpm	1500	



| • In Closing



We believe that the Project presents exciting opportunities and challenges for all the parties.

We have no doubt that working together, the Project can be executed safely, timeously, on budget and to the benefit of all the role-players.

We believe our Program to be aggressive, but realistic, and our price to be fair and competitive.

These were some of the completed projects, now we would like to show you a few videos of the manufacturing facilities.....