



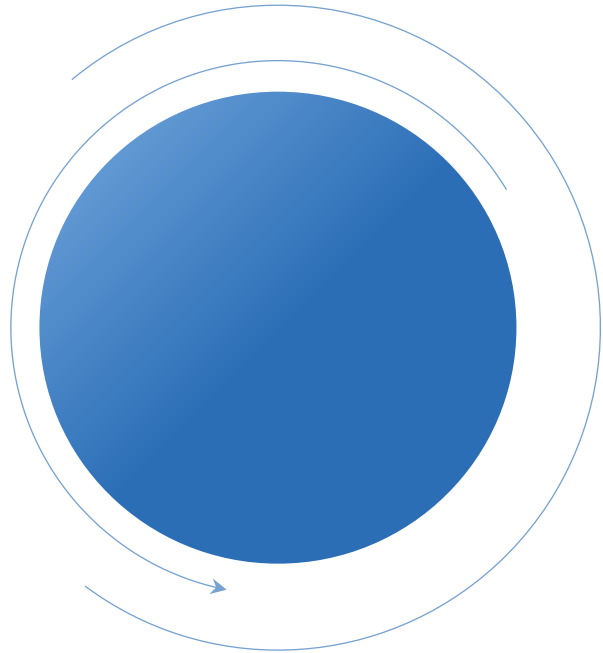
# ***Packing more power into tighter spaces: High-density energy storage design for Europe's utility and C&I Projects***

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# Market **01** Challenges

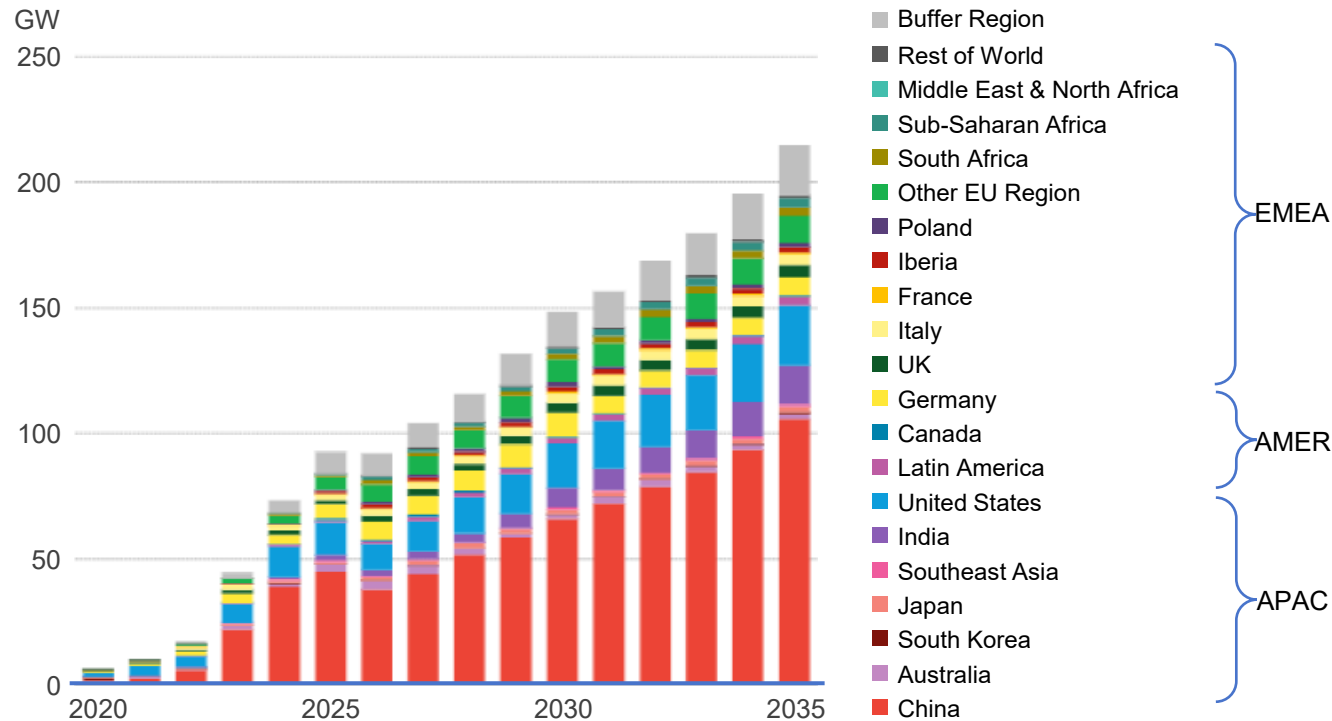
# Global BESS Market Overview

The global energy storage market is projected to reach a cumulative installations of ~1,000 GW by 2040, with a **23% CAGR** through 2030.

**Utility-scale storage** remains the core driver of global growth, with GWh-scale projects already operational or under construction across all continents.

Developers are prioritizing **LCOE reduction** through 5MWh+ liquid-cooled architectures.

**Distribution of New Installed Capacity in the Global Energy Storage Market**



**23%**

Projected CAGR for the global energy storage market (in GWh) from 2023 to 2030



**94GW / 247GWh**

Projected global new installed storage capacity in 2025



**8**

Regional markets have seen GWh-scale storage projects since early 2024

# European Market Challenges

## Land and Permitting Challenges

Soaring Land Costs ●

Time-Consuming Approvals ●

Grid Connection Delays ●



## Logistics and Grid Challenges

● Logistics Bottlenecks

● Grid Stability Requirements

● Stringent Safety Regulations

# Utility-Scale <sup>02</sup> Solutions

# High-Density Architecture

An innovative "back-to-back" integrated architecture revolutionizes land utilization efficiency.

## Core Design Philosophy

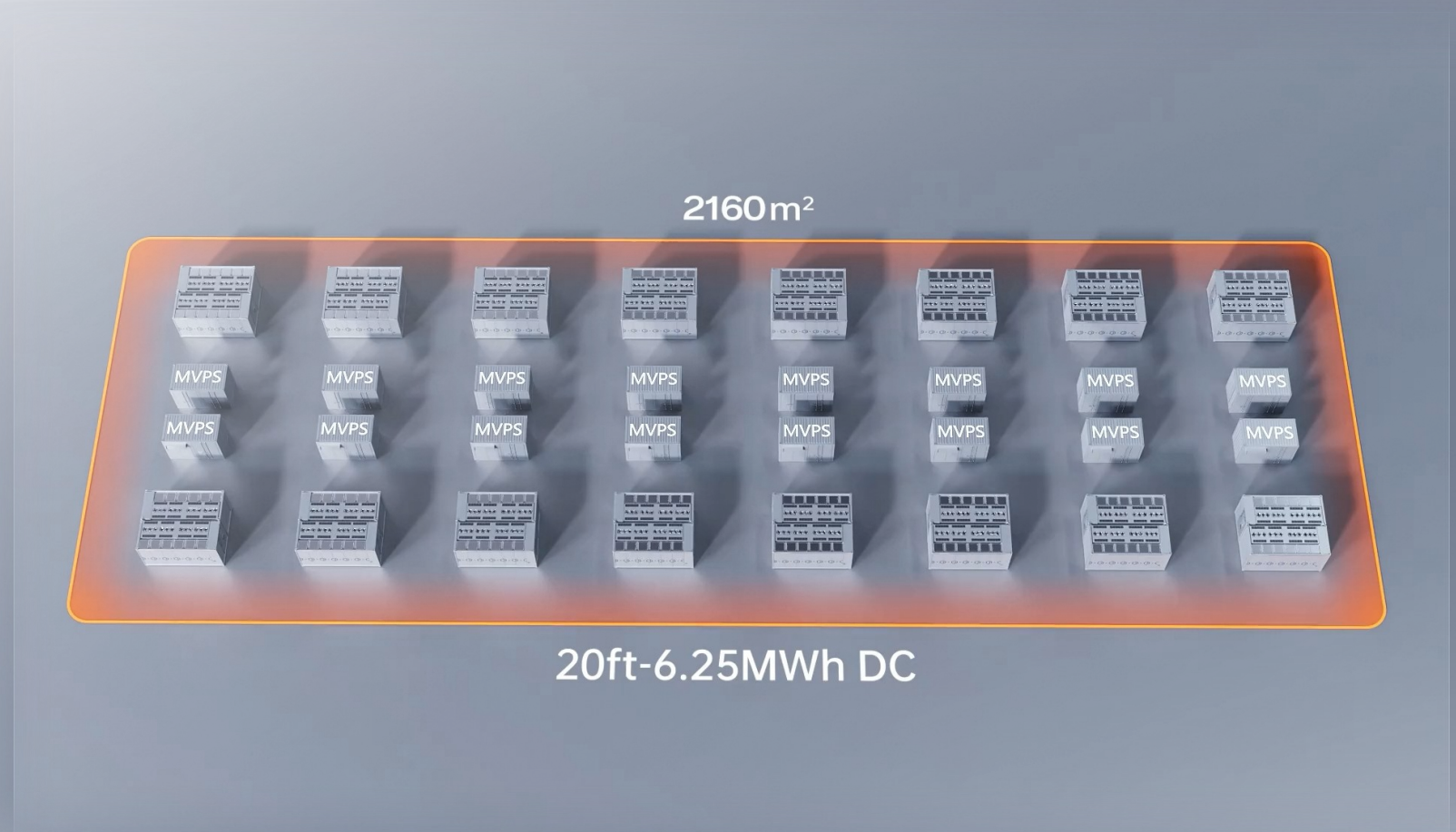
The "Efficiency-First Architecture" maximizes energy density per unit area through a compact, modular design philosophy.

## Enhanced Energy Density

Compared to traditional 20ft container solutions, the HyperBlock M platform achieves a "28%" increase in energy density, allowing more storage capacity on the same footprint.

## Reduced Land Footprint

It enables a **21.9%** reduction in the occupied area, which directly translates to lower land acquisition costs and faster permitting.



**28%**  
Energy density improved.

**21.9%**  
Significant reduction in the area of occupation.

**20%**  
Cables cost reduced

**Standardized module design balances flexible configuration with convenient transportation, solving European logistics problems**



## **Standardized Mega-Blocks**

The system uses standardized 10ft modules (3.2MWh each), which are small enough to avoid heavy-haul permits on European mountain roads

## **Rapid Deployment Advantage**

Pre-integrated design allows for "Plug-and-Play" installation, reducing on-site labor and commissioning time from months to weeks.

## **Flexible Configuration**

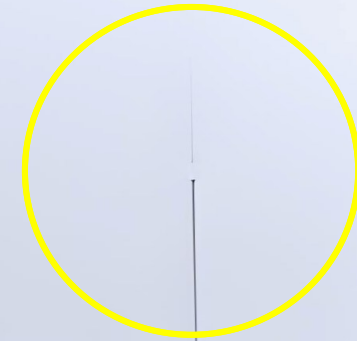
Supports various configurations (1, 3, 5, or 6 blocks) to adapt to different site shapes and capacity requirements, providing ultimate flexibility.

# Project cases | Standalone Energy Storage Project in Königsee, Germany

10.35MW/22.36MWh Project

Adaptation to uneven ground and LPS installation

3.72 MWh each, 22.32 MWh in total, 0.5C



LPS

Metal basement



# Project cases | GWh-scale Standalone Energy Storage Station

## Project cases | GWh-scale standalone project in Gansu Province

### Jiuquan 250MW/1000MWh Project

200 sets of BESS containers with 5MWh each - project delivered in 2 months

#### Professional Trading Services

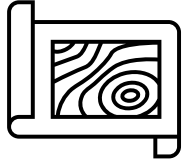
- Proprietary price forecasting models tailored to market characteristics
- Multi-day charge-discharge optimization

#### HyperStrong AI Platform

- Real-time monitoring of electricity market dynamics
- Intelligent adjustment of trading strategies
- Smart O&M and diagnosis & alarm system

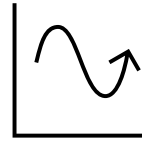


# 03 C&I Energy Storage Solutions



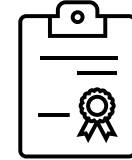
## Space Constraints

Industrial parks and commercial buildings often have limited roof or yard space, requiring highly compact energy storage solutions.



## Peak-Valley Arbitrage

Businesses aim to reduce electricity bills by charging during off-peak hours and discharging during peak demand periods to capture price spreads.



## Reliability Requirements

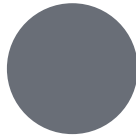
Critical facilities such as data centers and hospitals require multi-path power assurance to ensure uninterrupted operation.

# Powering European Business with Intelligent Energy Storage



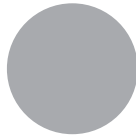
## Global Compliance

Certified for grid connection in the Netherlands, Sweden, Romania, and Hungary.



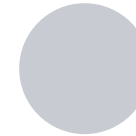
## Flexible Deployment

Plug-and-Play design supports parallel connection of up to 20 units.



## Ultimate Safety

Multi-dimensional sensing (temperature, smoke, gas) + "Core-Cold" thermal management.



## Smart Intelligence

AI algorithms optimize charging/discharging strategies and predict failures.



**91%** Efficiency

**12+** Years Life

**IEC/DE** Certified

**1-20** Scalable

# O&M Friendly thanks to HyperStrong's AI



Integrate the cloud platform of HyperStrong AI Intelligent O&M System

Ex-ante: Predictive maintenance

In-process: AI troubleshooting

Afterwards: Processing solution guidance

## Core Function:

- Real-time alarm
- Remote control
- Operation monitoring
- Intelligent Inspection
- Work order linkage
- Online operation manual
- Power station Analysis report
- Cloud equilibrium
- Fault expert database
- Intelligent O&M Expert Assistant (HyperGenie)

## Values:

Easier O&M

Smarter Power stations

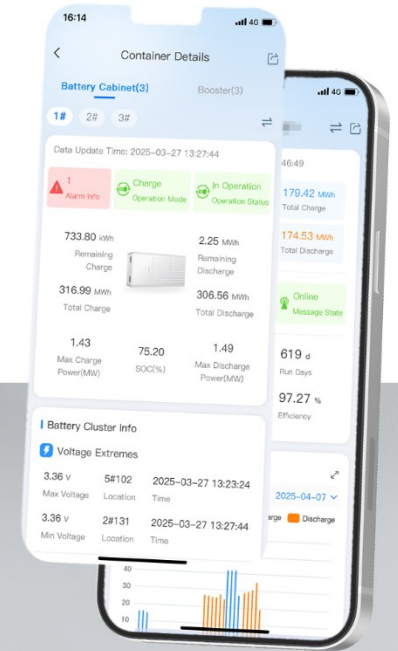
Higher availability

More timely service

## Web interface



## App interface



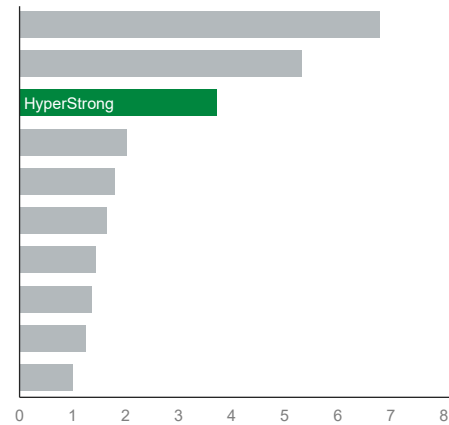
# 04

## About Us

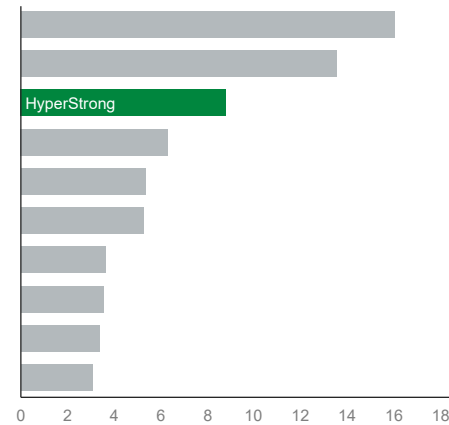
## TOP 3 BESS Integrator Globally

Source: S&P Global Commodity Insights

Global BESS capacity installed in 2024  
by top 10 integrators (GW)



Global BESS capacity installed in 2024  
by top 10 integrators (GWh)



## TIER 1

Energy Storage Provider

Source: BloombergNEF

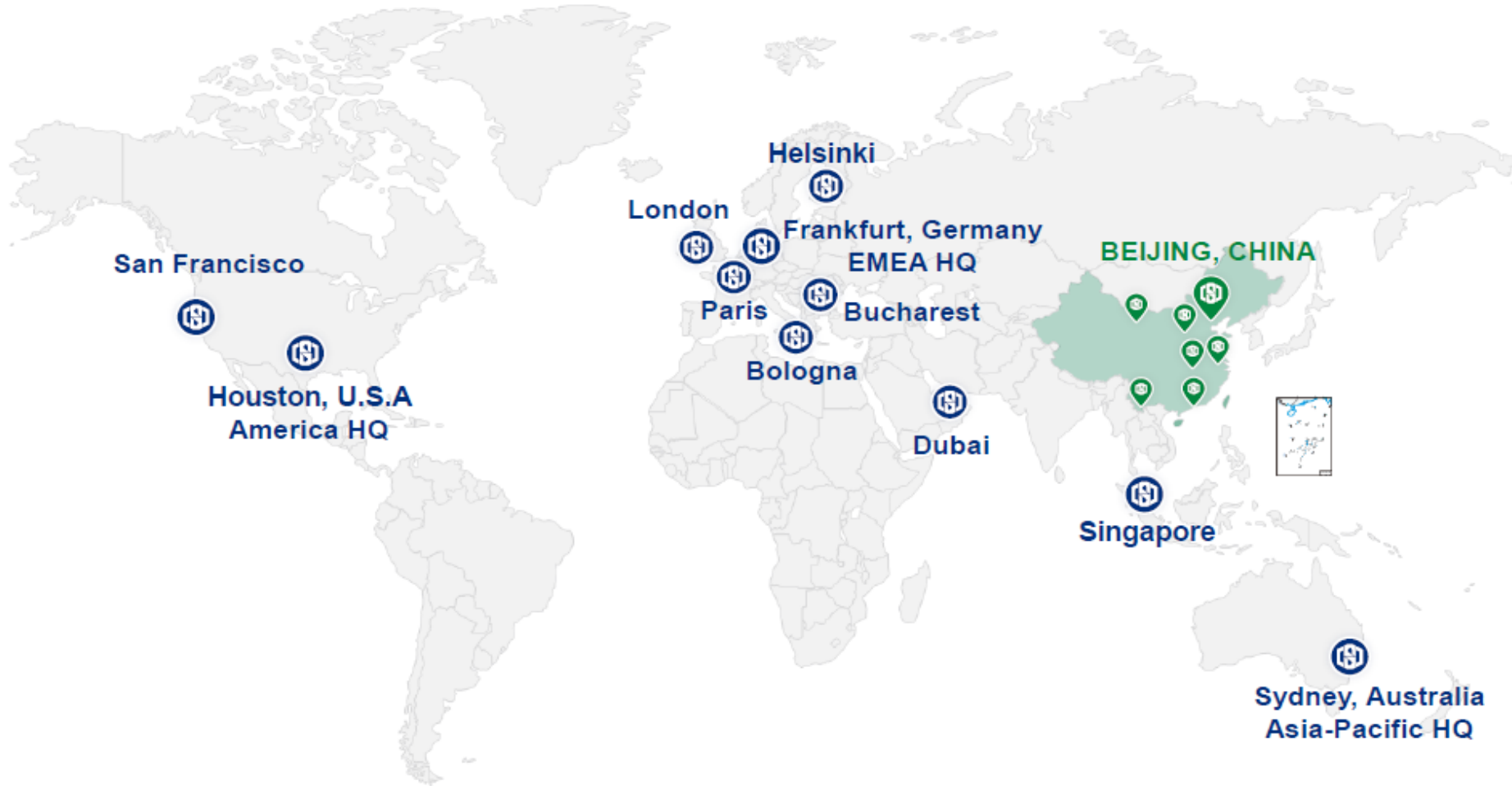
## NO. 1

BESS Integrator in terms of cumulative installed capacity in China as of end of 2024

Source: China Electricity Council



# Global market - regional presence and local O&M capabilities



## HEADQUARTERS

Beijing, China

## REGIONAL CENTERS

Frankfurt, Germany  
Houston, USA  
Sydney, Australia

## TESTING CENTERS

Beijing  
Zhuhai, Guangdong

## R&D CENTERS

Beijing  
Wuhan, Hubei  
Zhuhai, Guangdong


## INTELLIGENT MANUFACTURE BASES


Beijing  
Datong, Shanxi  
Jiuquan, Gansu  
Zhuhai, Guangdong  
Baotou, Inner Mongolia




# Making Energy Storage Simple

Learn More about HyperStrong

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