



Emerging Applications in Energy Storage: Powering Tomorrow's Innovations

Dr. Stefano G. Alberici, Ph.D.
VP Technology / Country Mgr. South Europe
HyperStrong International

We dedicated ourselves to BESS for more than a decade since 2011



Global Leader in Energy Technology Innovation

Listed Company on Shanghai Stock Exchange

13⁺ years
BESS R&D

300⁺
Projects

20⁺ GWh
Deployed

25⁺ million
Cells analyzed

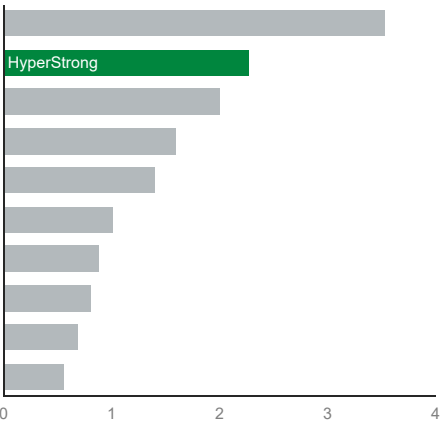
0
Safety issues

TOP 3

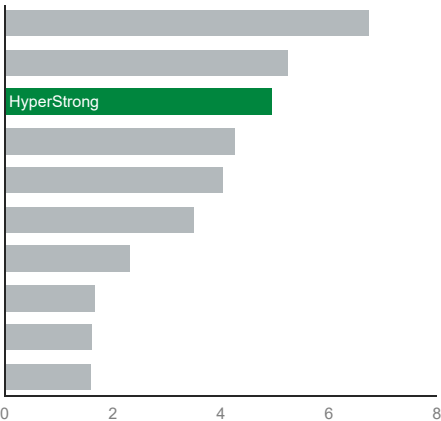
BESS Integrator Globally

Source: S&P Global Commodity Insights

Global BESS capacity installed in 2023 by top 10 integrators (GW)



Global BESS capacity installed in 2023 by top 10 integrators (GWh)



TIER1

Energy Storage Manufacturer

Source: BloombergNEF

NO. 1

BESS Integrator in China (mainland) in terms of cumulative installed and contracted capacity

Source: S&P Global Commodity Insights

NO. 1

BESS Integrator in China for 3 Consecutive Years

Source: Electrical Energy Storage Alliance

Long-term commitment to the global market



4 INTELLIGENT
MANUFACTURING BASES

3 OVERSEAS REGIONAL
HEADQUARTERS

3 R&D CENTERS

2 TESTING CENTERS

NO.1 smart manufacturing capability to ensure timely and premium delivery



4

• Smart Manufacturing Bases



85%

• Automated Production Lines



3 Smarts

- Smart Production Lines
- Smart Warehousing
- Smart Logistics



35GWh

• Production Capability per Year

Jiuquan



Beijing



Datong



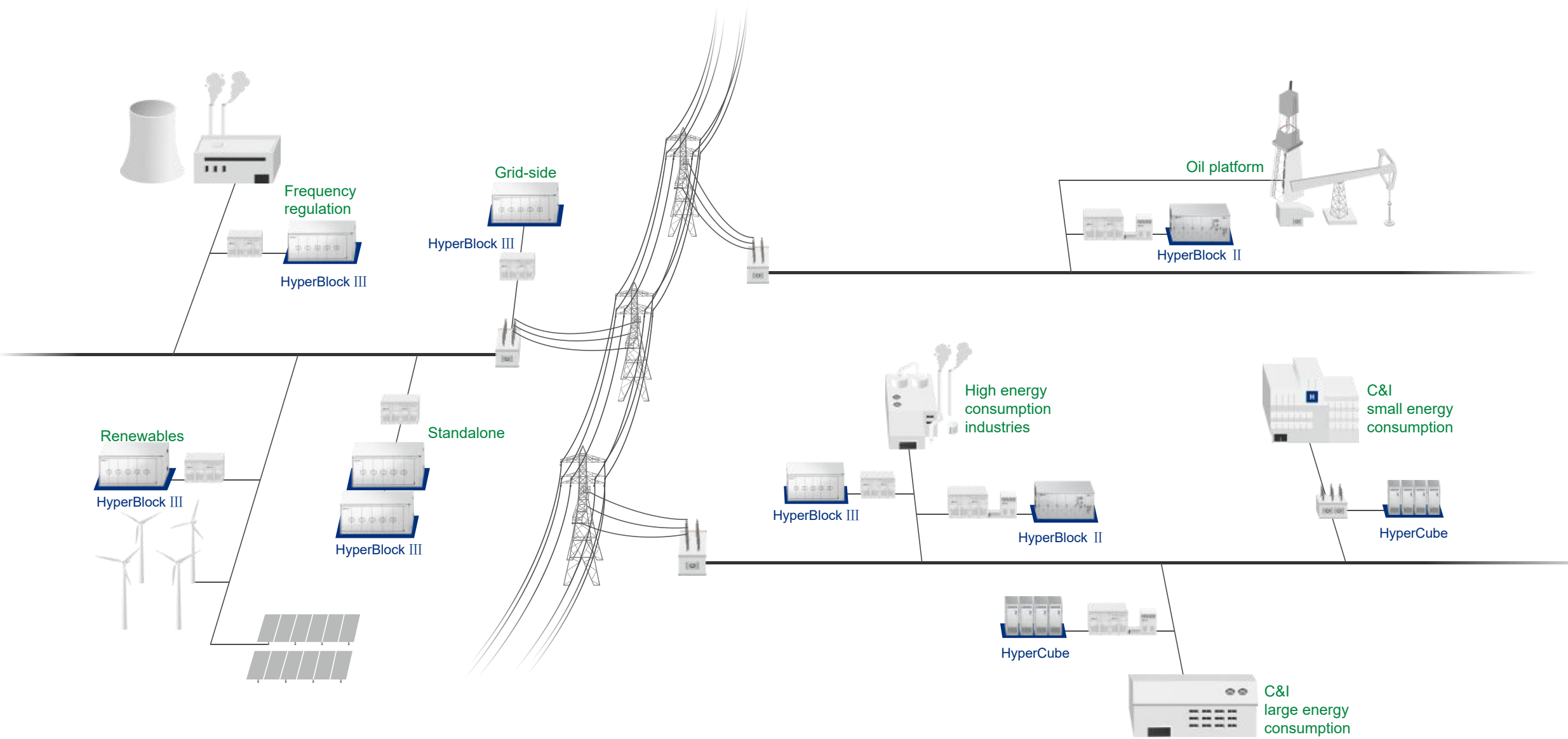
Zhuhai



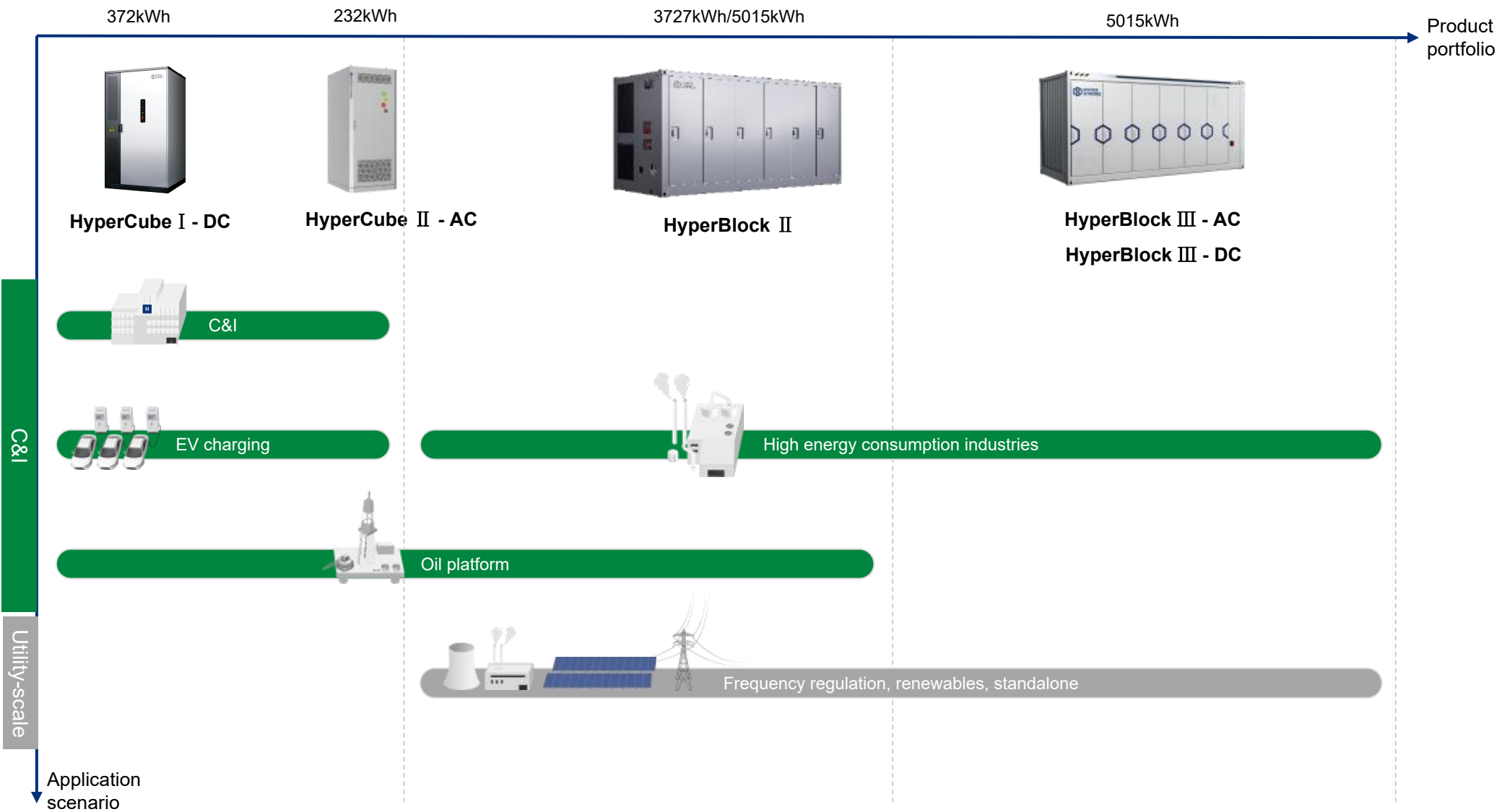
Zibo



Solutions for all application scenarios



Product portfolio for utility and C&I applications



Project cases | Utility-scale BESS projects

References



1GWh+	2 projects
600MWh+	3 projects
300MWh+	22 projects
200MWh+	24 projects
100MWh+	26 projects



China's largest BESS project with
1.2 million cell deployed
250MW/1GWh



China's largest PV+ BESS project
175MW/700MWh



World's Largest Shared BESS project
300MW/600MWh



China's largest Liquid-cooling BESS project
300MW/600MWh



China's largest Agrivoltaics + BESS project
125MW/500MWh



World's largest standalone grid-side project
240MW/480MWh



China's first 100MW decentralized
control BESS station
100MW/212MWh



China's first BESS project to
participate in spot power trading
101MW/202MWh



China's first grid-side shared ESS
with complete spot transaction and
ancillary services
100MW/201MWh



Project cases | Adaptation to all extreme conditions



- Inner Mongolia
60MW/120MWh

Low temperature
-30°C ❄️❄️



- Hunan
10MW/20MWh

Low temperature, humidity
Freezing rain ☁️🌧️



- Xinjiang
65MW/260MWh

Sandy & Extreme temperature
difference **-30°C ~ 40°C** ☀️🌬️



- Chongqing
3MW/3MWh

High temperature & high humidity
40°C 90% RH ☁️🌧️



- Hainan
15MW/30MWh

Coast
Salty fog ☁️🌊



- Xizang
20MW/80MWh

High altitude
≥4700m 🏔️



Project cases | China's largest BESS project with 1.2 million cells deployed



250MW/1GWh Santanghu

**176 sets of BESS containers with
5.734MWh each**

Business Value

- Enhances grid frequency regulation modulation
- Improves renewable energy utilization
- Regulates the intermittency, randomness and volatility of wind power
- Promotes green industry development
- Adapts well with extreme weather conditions



Project cases | China's largest standalone grid-side project



300MW/600MWh Fuyang

90 sets of 1500V BESSs

Business Value

- Improves power station efficiency
- Reduces footprint
- Enhances safety



240MW/480MWh Hechuan

72 sets of BESSs

Business Value

The BESS ensures timely responses to grid load gaps and fluctuations, effectively improving the power grid's stability

Solution

70 sets of 3.354MW/6.709MWh battery energy storage systems and 2 sets of 2.61MW/5.218MWh battery energy storage systems, totaling 480MWh



References

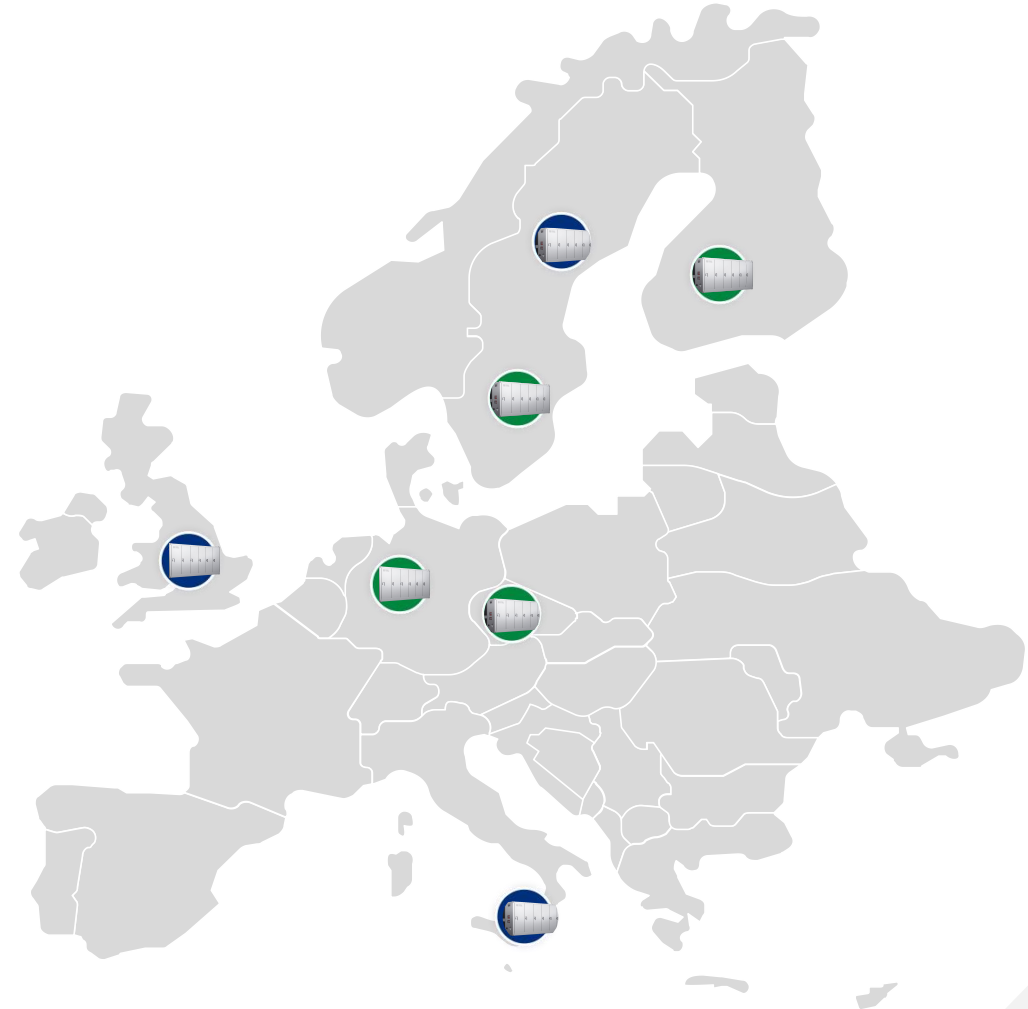


Germany: 410MWh

Finland: 825MWh

Sweden: 10MWh

Czech: 6.5MWh



How to get hold of us:

UK, West Europe: yu.xia@hyperstrong.com

South Europe: stefano.alberici@hyperstrong.com

Iberia, Nordic, East Europe: marco.furtado@hyperstrong.com

Germany: kan.wu@hyperstrong.com

www.hyperstrong.com



info@hyperstrong.com

Follow us on LinkedIn

