



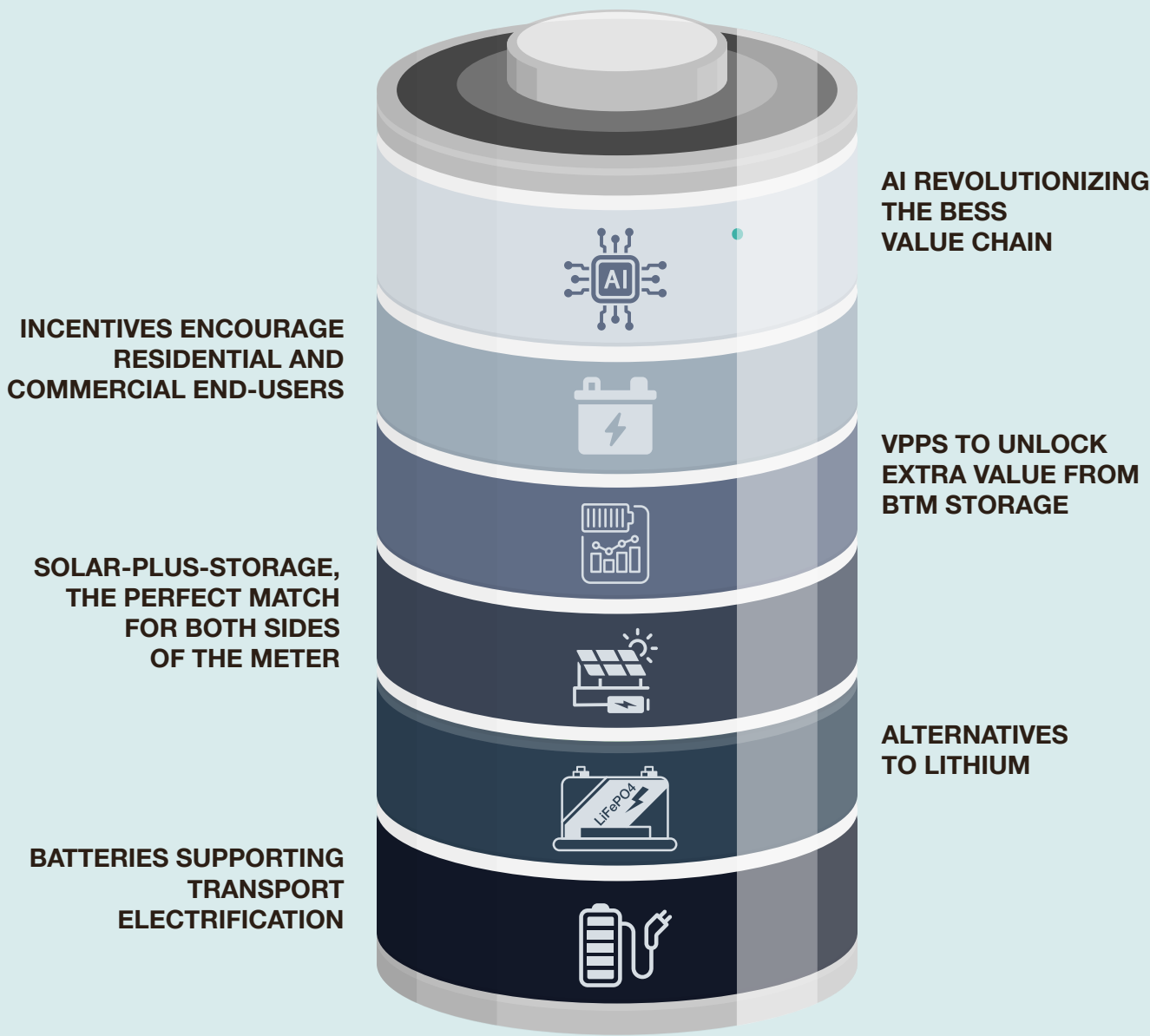
GROWTH OPPORTUNITIES IN THE BATTERY ENERGY STORAGE SYSTEMS (BESS) INDUSTRY

Advanced Digital Technologies are Driving Transformational
Growth for Front- and Behind-the-meter Applications

AN EXCLUSIVE REPORT FOR THE WORLD FUTURE ENERGY SUMMIT BY
F R O S T & S U L L I V A N



KEY ADVANCEMENTS SHAPING THE BESS INDUSTRY



GROWTH DRIVERS 2024 - 2025

Storage Solutions Key to Unlocking Grid Value in Renewable Energy Surge

Surging low-carbon goals and cheaper wind and solar are fast-tracking renewables - making energy storage vital to stabilize supply and unlock grid value.

Rising Power Costs Push Shift to Solar + Storage

Soaring power costs and affordable BTM solar are driving businesses and homes to adopt solar-plus-storage for smarter, cheaper energy.

Policy Push Boosts Battery Adoption

Supportive policies, incentives, and market reforms are strengthening the case for grid-scale and BTM battery projects.

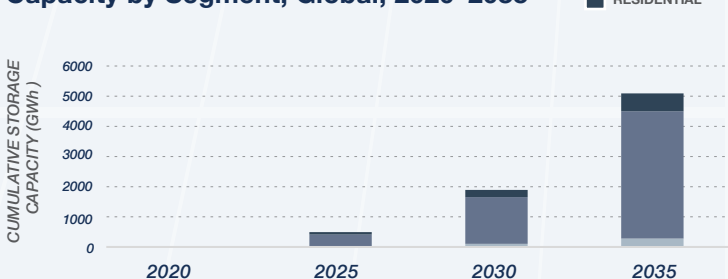
EV Boom Powers Better, Cheaper Energy Storage

The EV surge and rising battery production are driving better BESS performance and lower costs.

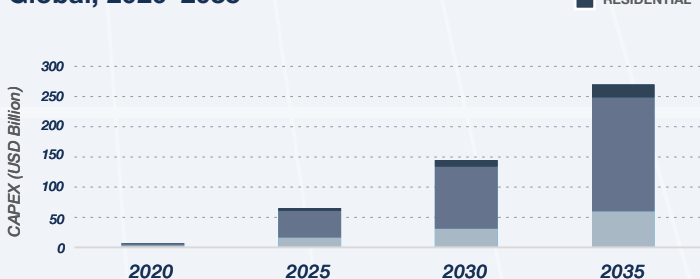
Extreme Weather Drives Demand for Resilient Energy Storage

Frequent weather events and grid disruptions are fueling energy security concerns, making BESS a reliable backup for end users.

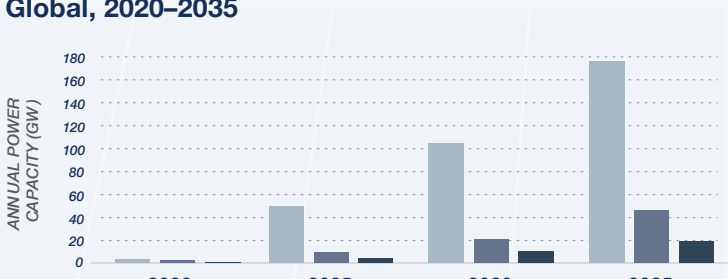
**BESS Industry: Cumulative Storage
Capacity by Segment, Global, 2020–2035**



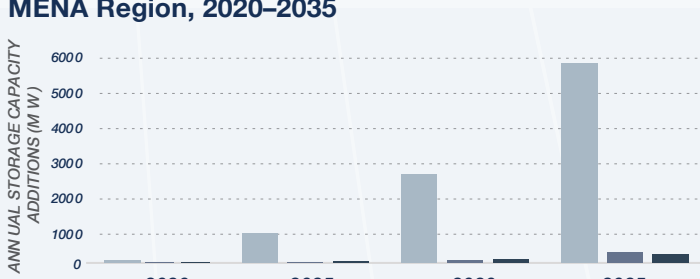
**BESS Industry: Capex by Segment,
Global, 2020–2035**



**BESS Industry: Annual Power Capacity
Additions by Segment,
Global, 2020–2035**



**BESS Industry: Annual Storage Capacity
Additions by Segment,
MENA Region, 2020–2035**



BESS INDUSTRY IN THE MENA REGION 2020- 2035

Short term target (2026) is to achieve $\geq 300\text{MW}$ / 300MWh BESS capacity as per EWEC's mandate.

KEY UPCOMING PROJECTS:

- **EWEC** 400MW / 400MWh standalone BESS for UAE grid was awarded to a consortium of companies: EDF Renewables (France), Engie (France), Saudi Electricity Company (SEC) / Hajj Abdullah Alireza Company (Haaco), and Jinko Power (China) / Alghanim International (Kuwait)
- **Masdar Solar** and **EWEC** are developing a \$6 billion, 5GW solar facility backed by 19GWh BESS in Abu Dhabi expected to be operational by 2027.

KINGDOM OF
SAUDI ARABIA

UAE

Saudi Arabia plans to have 8GWh of energy storage projects in operation by 2025, and aims to increase it to 22GWh by 2026.

KEY UPCOMING PROJECTS:

- Largest grid-scale BESS project of 12.5 GWh capacity to be built by BYD & SEC across 5 different sites in the Kingdom.
- Grid-scale BESS project of 7.8 GWh capacity to be built by Sungrow and Algihaz Holding across 3 locations by 2025.
- Stand-alone BESS project of 2GW/8GWh capacity to be developed by Saudi Power Procurement Company (SPPC).

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