Power conversion system revenues to reach $12.7bn by 2029

- Demand for BESSs is fueled by rising electricity prices and growth of the renewable energy sector, particularly in EMEA.
- Installation rates for BESSs are expected to grow by a CAGR of 26% between 2022 and 2030 in APAC.
- The global PCS market was worth $8.2bn in 2023, compared with $7.3bn in 2022.

London, 24th January 2024 – According to a new market intelligence report by specialist research firm Interact Analysis, global battery energy storage system (BESS) installations reached 38.8 GW in 2023, a record high compared with 18.5 GW in 2022. Falling costs of BESS systems and government policies are driving up installation rates.

Front-of-the-meter (FTM) is the dominant application type, accounting for 72% of total global installations in 2022 and rising to 76% in 2023. Asia Pacific (APAC) is by far the largest region for BESS installations, with rates in APAC expected to increase faster than any other region - at a CAGR of 26% between 2022 and 2030.

The market has seen a surge in BESS installations in China, with the overall installation rate in APAC reaching 20.9 GW in 2023. Interact Analysis estimates there were 11.1 GW of installations in the Americas in 2023, double that of 2022. By 2023, the Americas accounted for approximately 29% of all installations, making it the second largest regional market for BESS installations.

EMEA is behind in terms of BESS installations when compared with the US and APAC. But high electricity prices and growth in the renewable energy sector is fueling demand for BESSs in the region. By 2030, the region will see 15.1 GW of new installations representing an annual growth rate of 16% between 2022 and 2030.

BESS demand drives growth for the power conversion system market

Shipments of power conversion systems (PCS) also reached a new high of 89 GW in 2023 compared with 55 GW in 2022. The global PCS market was worth $7.3bn in 2022, which is expected to have increased to $8.2bn in 2023 – a growth rate of 12%. This growth is mainly driven by surging demand for BESSs.

As with the BESS market, APAC leads the way for PCS shipments, accounting for 49% of the total in 2023. The Americas follows with a share of 31%. However, looking at the PCS market by revenues, EMEA is the largest region, generating more than $3.2bn in 2023. This is due to the higher selling price of PCSs in Europe compared with APAC and the Americas.
Shirly Zhu, Principal Analyst at Interact Analysis comments, “The global market for PCSs is geographically consolidated, with the top 10 countries combined accounting for 92% of the total market in 2023. This share is expected to drop over time as BESS technology is adopted across an increasing number of countries. China is by far the largest market for PCS technology, accounting for 37 GW of shipments in 2023, rising to 93 GW by 2029.

“The market landscape for PCSs to BESS applications is relatively fragmented and it is attracting a number of new entrants. Chinese vendors have a strong influence on the global market, primarily due to their dominant presence in the solar inverter market. Eight of the top 10 suppliers to the PCS market are based in China.”

About the Report:

To meet Carbon Neutral objectives, energy storage deployments are booming globally, bringing both opportunities and challenges for companies involved in the supply chain.

This new report provides insight and in-depth analysis into the market for power conversion systems (PCS) used in battery energy storage systems (BESS), also known as energy storage inverters or hybrid inverters.

About Interact Analysis

With over 200 years of combined experience, Interact Analysis is the market intelligence authority for global supply chain automation. Our research covers the entire automation value chain – from the technology used to automate factory production, through inventory storage and distribution channels, to the transportation of the finished goods. The world’s leading companies trust us to surface robust insights and opportunities for technology-driven growth. To learn more, visit www.InteractAnalysis.com