EIC INSIGHT REPORT ENERGY STORAGE



Executive summary

The energy storage industry is predicted to grow rapidly in the coming years. Some analysts suggest the global market could double six times by 2030, reaching a capacity of around 125GW. One driver is the advent of renewable energy. As wind and solar energy take growing roles in global energy systems, the importance of balancing out their intermittent supply increases. Energy storage represents a key way of providing this extra flexibility.

This is the EIC's first Energy Storage Insight Report. The opening section gives a brief introduction to the basics of energy storage, including different use cases and supply chain opportunities for each technology. The second section contains a deeper examination of the lithium-ion battery sector, the energy storage technology with the greatest short-term growth potential. Areas covered include a global market overview: achievements in cost reduction; an analysis of key UK projects, supply chain capability and opportunities; and potential export markets.

2017 was a boom year for the UK battery storage industry. Installed capacity in the UK increased from 60MW in January to around 200MW

by the end of the year. 100MW were commissioned across November and December alone. Falling battery pack prices and government support have led to predictions that this rapid growth will continue. The All Party Parliamentary Group on Energy Storage recently predicted that the UK could install 8-12GW of battery storage by 2021. The major drivers and projects behind this rise are discussed in detail in the report.

Battery manufacture is dominated by countries in the far east (China, Japan and South Korea), along with the US. However, opportunities exist for the UK supply chain in other areas. The government's Smart Systems and Flexibility Plan aimed to position the UK as a global leader in next-generation battery technology research. Local companies can also get involved in the pre-construction, EPC and O&M stages of a battery project. The report outlines the services required in the development of a battery storage facility and identifies the major developers and Tier 1 contractors that award contracts.

Research by Ricardo-AEA suggests that energy storage could become a significant sector for export growth in the UK. The high domestic deployment rate of utility-scale projects compared to other countries has allowed UK companies to develop expertise in the area. Constructing utility scale assets for distributed storage and EFR services in developed nations represents an opportunity. Of a 10MW project costing around £10m, it is estimated that UK companies could provide 50%. There could also be greater international prospects for building behind-the-meter storage than in the UK, where the market has been slow to expand. The report explores potential export markets, including Germany (the global leader in residential energy storage), the US (the world leader in utility-scale battery storage) and Australia (tipped to become the world's biggest battery storage market in the future).



Get the complete Insight Report

EIC members can download the full report via EICDataStream

Not an EIC member?

To buy a copy of the report, please contact Amisha Patel, Head of Power, Nuclear & Renewables and Public Affairs

Email: amisha.patel@the-eic.com