

Energy Storage Quality Control

Energy storage quality assurance and quality control (QA/QC) services ensure the reliability, safety, and long-term performance of battery energy storage systems (BESS) . They are provided during the early stages of a BESS project, including the pre-contract, pre-manufacturing, and manufacturing phases. By identifying and addressing potential defects in BESS components early, our QA/QC services minimize project risks, ensure compliance with quality standards, and ensure the durability of our client's investments in [energy storage solutions](#).



THE Applus+ SOLUTION

Enertis Applus+'s highly specialized BESS quality control and quality assurance services cover the planning and manufacturing phases of battery energy storage systems projects. They ensure reliable BESS solutions that meet industry standards and quality requirements and improve BESS performance, which is measured through key indicators such as capacity, efficiency, output power, charge/discharge rates, and thermal management. Performance testing, real-time monitoring, and regular audits optimize efficiency, safety, and compliance with network requirements.

We have a team of highly qualified engineers and a track record of 100 GWh of BESS projects worldwide. Our activities are completely independent of manufacturers so that we can verify the quality of BESS equipment without bias.

Our services in BESS QA/QC include:



- **Technical advisory during negotiations with equipment suppliers**, providing our clients with guidance and support during supplier negotiations. These services aim at ensuring compliance with technical specifications, quality standards, and warranty terms
- **Bankability reports** for equipment suppliers. Through detailed assessments, we evaluate the financial and technical credibility of BESS equipment suppliers
- **Supply chain traceability** to ensure transparency in the sourcing, production, and delivery of battery cells, modules, packs, and other BESS components
- **Vendor's qualification** to verify suppliers' capabilities to deliver reliable BESS components
- **Factory audit** to assess suppliers' production capabilities, potential risks during manufacturing, quality control processes, and compliance with relevant industry standards
- **On-site manufacturing oversight** to supervise the manufacturing and assembly process of BESS components
- **Factory Acceptance Test (FAT) witnessing** to ensure that equipment meets performance guarantees and functional requirements before it is shipped to the project site

Key customer benefits

With our independent energy storage quality control services, BESS project owners and developers:

- **ensure compliance and reliability**, verifying that BESS components meet industry standards and project specifications
- **enhance safety**, identifying manufacturing defects at the origin
- **improve performance and efficiency**
- **reduce project risks and delays** by detecting manufacturing defects early in the production process
- **optimize supply chain and vendor selection**, ensuring traceability of battery components and quality consistency

In addition to quality control services, we provide comprehensive [BESS engineering services](#), offering a wide range of solutions at any stage of the project, from site evaluation and feasibility analysis to performance testing, construction monitoring, and commissioning supervision, among others.