



RESEARCH REPORT

Executive Summary:

Navigant Research Leaderboard Report: Energy Storage Systems Integrators

Assessment of Strategy and Execution for
12 Energy Storage Systems Integrators

NOTE: This document is a free excerpt of a larger report. If you are interested in purchasing the full report, please contact Navigant Research at research-sales@navigant.com.

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Section 1

EXECUTIVE SUMMARY

1.1 Market Introduction

While advanced battery prices have fallen anywhere from 40% to 60% in the past 18 months thanks to manufacturing innovations and volumes, pricing for energy storage systems (ESSs) is still highly variable. This variation is a function of system size, volume ordering, and business models. However, now that battery prices have responded to cost pressures, the rest of the balance of plant and energy storage systems integration (ESSI) vendors are under more pressure to deliver more consistent pricing. In addition, the scaling of the industry overall will rely on the ESSI players and their approach to the market.

ESSI players include pure-play utility-scale players and distributed storage developers, but nearly all ESSI players bring their unique software and controls to the market. This is typically the primary technical differentiator for ESSI.

The criteria by which energy storage systems integrators are compared in this *Navigant Research Leaderboard Report* include:

- » Vision
- » Go-to-Market Strategy
- » Partners
- » Production Strategy
- » Technology
- » Geographic Reach
- » Sales, Marketing, and Distribution
- » Product Performance
- » Product Quality and Reliability
- » Product Portfolio
- » Pricing
- » Staying Power

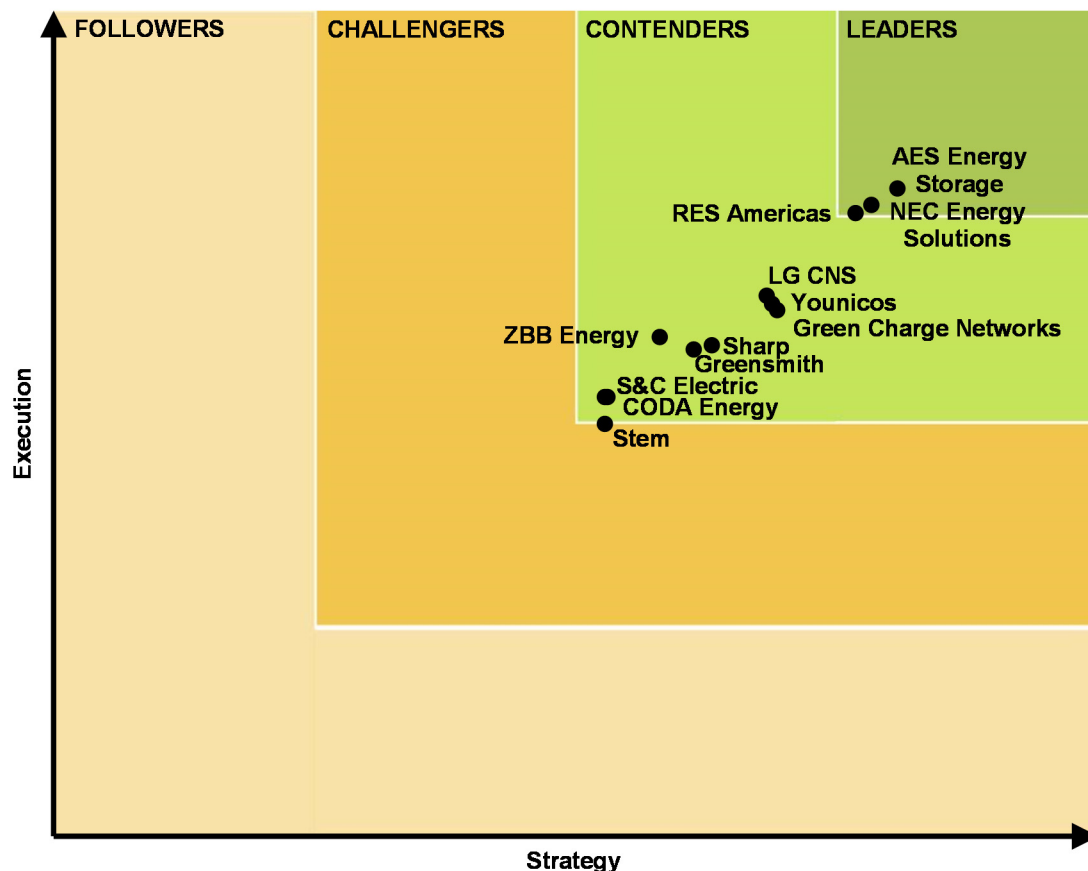
Detailed descriptions of each criterion are provided in the “Criteria Definitions” section of this report.

1.2 The Navigant Research Leaderboard Grid

The future market for ESSI will be led by firms that are responsive to market demand, provide compelling offers within the marketplace, and pursue scalable business models. These characteristics are particularly important for the ESSI space. In the past, ESSI firms have failed as a result of poor management or business strategy, even while their core technology offer was thoroughly demonstrated and provided added value.

The ESSI portion of the energy storage value chain is the section that is most responsive to the needs of the end user, which is the ESSI firm's direct customer. As a result, a high level of customization is often required of ESSI players. There is friction between the cost pressures in the market and the demand for flexibility in storage systems. The most successful ESSI firms will be those with the technology, strategy, and execution that permit both competitive pricing and compelling customer value propositions.

Chart 1.1 The Navigant Research Leaderboard Grid



(Source: Navigant Research)

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Section 9

SCOPE OF STUDY AND METHODOLOGY

9.1 Scope of Study

The scope of this report is limited to the Strategy and Execution associated with leaders in the global market for ESS. These offers tend to be based on software and controls for storage systems. The companies active in this market are diverse, ranging from IPPs and equipment OEMs to pure-play software vendors. Note that company rankings capture the vendor's standing at the time of the report and are not a retrospective of past accomplishments or an indication of future success. The ratings are likely to change rapidly as this market matures and business models continue to evolve. Moreover, the report is not exhaustive, as there are other global and smaller players in the market that were not included because of their specific focus on one aspect of the market or their lack of geographic reach.

9.2 Sources and Methodology

Navigant Research's industry analysts utilize a variety of research sources in preparing Research Reports. The key component of Navigant Research's analysis is primary research gained from phone and in-person interviews with industry leaders including executives, engineers, and marketing professionals. Analysts are diligent in ensuring that they speak with representatives from every part of the value chain, including but not limited to technology companies, utilities and other service providers, industry associations, government agencies, and the investment community.

Additional analysis includes secondary research conducted by Navigant Research's analysts and its staff of research assistants. Where applicable, all secondary research sources are appropriately cited within this report.

These primary and secondary research sources, combined with the analyst's industry expertise, are synthesized into the qualitative and quantitative analysis presented in Navigant Research's reports. Great care is taken in making sure that all analysis is well-supported by facts, but where the facts are unknown and assumptions must be made, analysts document their assumptions and are prepared to explain their methodology, both within the body of a report and in direct conversations with clients.

Navigant Research is a market research group whose goal is to present an objective, unbiased view of market opportunities within its coverage areas. Navigant Research is not beholden to any special interests and is thus able to offer clear, actionable advice to help clients succeed in the industry, unfettered by technology hype, political agendas, or emotional factors that are inherent in cleantech markets.

9.2.1 Vendor Selection

Vendors were selected based on market presence, commercial activity, and unique expertise related to ESS. Pure-play component integrators, such as Flextronics, are not included because such firms do not contribute the integration expertise required to deliver an intelligent storage system to the customer. Another key differentiator for the set of companies included in this *Leaderboard Report* is profitability—all of the companies profiled are charged with ensuring that a storage system functions properly on a technical level, but they are also tasked with ensuring the profitability of the system for the customer. Some firms in the space were excluded due to imperfect information. This does not reflect a lack of market activity, but rather, a deficit of information at the time of publication.

9.2.2 Ratings Scale

Companies are rated relative to each other using the following point system. The ratings are a snapshot in time, showing the current state of the company. These scores are likely to be fluid as new competitors enter the market and customer requirements evolve.

» Very Strong	91 – 100
» Strong	76 – 90
» Strong Moderate	56 – 75
» Moderate	36 – 55
» Weak Moderate	21 – 35
» Weak	11 – 20
» Very Weak	1 – 10

9.2.2.1 Score Calculations

The scores for Strategy and Execution are weighted averages based on the subcategories. The overall score is calculated based on the root mean square of the Strategy and Execution scores.

9.2.3 Criteria Definitions

9.2.3.1 Strategy

- » **Vision:** Measures the company's stated goals in designing market solutions against the actual needs of customers based on the entire environment in which they will operate. Clear and compelling visions that are effectively communicated to the industry result in higher scores.
- » **Go-to-Market Strategy:** Evaluates the company's strategy for reaching the target market, including the sales and marketing channels to be used, as well as the processes established for informing the target market about brand differentiation and unique product value.

- » **Partners:** Measures the company's established partnerships with key organizations that will provide an advantage in financial backing, sales, business, and product development. Affiliations with well-known battery manufacturers and other established vendors in the supply chain, as well as a track record of financial strength through fundraising or profitable product sales, positively affect scores in this *Leaderboard Report*.
- » **Production Strategy:** Evaluates the long-term competitiveness of the manufacturing plan as an effective solution that satisfies market requirements and meets market capacity needs. A component of this is an evaluation of the ability of the manufacturing base to supply product quality to meet market expectations and demand.
- » **Technology:** Evaluates whether the company has developed and/or patented technology that provides a significant business advantage over competitors that is likely to have an enduring impact on its success. Higher scores are given if the company's technology is already a proven market success or delivers unique product attributes.
- » **Geographic Reach:** An evaluation of companies' ability to reach national and international customers through networks of distributors and resellers. Scores are lower if the company does not have a sales strategy suitable for sales in multiple regions.

9.2.3.2 *Execution*

- » **Sales, Marketing, and Distribution:** Evaluates the company's marketing and sales performance and current distribution channel. Higher scores are given to companies with a large global network with access and support for current product.
- » **Product Performance:** Evaluates the competitive performance of the storage offerings. Higher scores are given to companies that provide more competitive performance profiles or guarantees and that deliver products that are reliable.
- » **Product Quality and Reliability:** Evaluates the quality and reliability of the storage offers delivered to customers, the company's strategy to develop quality products for the market, and its track record on quality with the current product line.
- » **Product Portfolio:** Addresses the products' relative competitiveness in and suitability to the market. Points are awarded for product performance (availability, reliability, lifetime, efficiency, bankability, and profitability) for the target market.
- » **Pricing:** Determines the suitability of product pricing based on its feature set, including whether products are available at multiple price points and how pricing compares to that of competitor products.
- » **Staying Power:** Evaluates whether the company has the financial resources to withstand weak or variable markets and price-based assaults by competitors. Also measures the company's likelihood to continue to pursue storage products in the event of market softening. Higher scores are given to companies with better financial performance and stronger capability to survive market downturns.

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