







Dear Team and Valued Stakeholders,

I am thrilled to share some exciting developments from the past month that underscore our collective commitment to driving the energy transition forward.

Industry Recognition and Thought Leadership

Our participation in the REconnect Summit 2025 in Jaipur highlighted the pivotal role of solar and energy storage in Rajasthan's renewable landscape. Additionally, at the EFY Expo in Pune, I had the opportunity to discuss how electronics and AI are revolutionizing battery energy storage systems, sparking meaningful conversations within the energy and tech communities.

Strategic Collaborations and Market Insights

We have renewed our membership with the India Energy Storage Alliance (IESA), reinforcing our dedication to advancing India's energy storage ecosystem. Furthermore, the recent SBICAPS research report emphasizes the growing importance of battery energy storage systems (BESS) in stabilizing the grid and improving investment returns, aligning with our strategic focus.

Innovations in Energy Storage Solutions

Our energy storage solutions continue to set industry benchmarks, offering:

10+ Year Warranty: Supporting long-term financing options.

Local Service Network: Ensuring maximum system uptime and reliability.

Custom Solutions: Tailored to optimize return on investment (ROI).

These offerings are designed to meet the evolving needs of our clients and contribute significantly to a sustainable energy future.

Addressing Industry Challenges

While the prospects are promising, we must acknowledge and address the challenges in the grid-scale battery storage sector in India. As highlighted in recent discussions, issues such as high upfront costs, regulatory uncertainties, and supply chain dependencies continue to impede rapid deployment. It's imperative that we collaborate with policymakers, industry peers, and research institutions to develop solutions that overcome these barriers and accelerate the adoption of energy storage technologies.

Looking Ahead

The global energy storage systems market is projected to grow exponentially, reaching USD 5.12 trillion by 2034. This growth trajectory presents immense opportunities for us to innovate and lead. By staying committed to excellence and adaptability, we can navigate the challenges and harness the full potential of the energy storage sector.

I extend my heartfelt gratitude to each of you for your unwavering dedication and support. Together, we are powering a cleaner, smarter tomorrow.

Warm regards, **Venkat Rajaraman**Founder & CEO

Cygni Energy Pvt. Ltd.

Cygni in the News

India's Battery Storage Boom is Coming 'Challenges in grid-scale battery storage space remain'

Richa Mishra Hyderabad

Hyderabad-headquartered Cygni Energy, though among the first movers in the energy storage solutions segment, still faces challenges in the grid-scale battery storage system space in India

Despite policy interventions by the government, there is still scope to improve, its top management feels.

The independent energy storage solutions company recently announced the commencement of its phase-I, fully-operational and automated Battery Energy Storage System (BESS) gigafactory. Set up on an investment of over ₹100 crore, the phase-I facility is designed with an initial capacity to produce 4.8 GWh of high-capacity battery packs for electric vehicles (EVs) and energy storage systems.

These advanced BESS sys-



Venkat Rajaraman, Founder & CEO, Cygni Energy

tems will cater to large gridscale stationary storage projects and independent power producers.

Speaking to businessline, Venkat Rajaraman, Founder and CEO of Cygni Energy, said, "Honestly, it's still a major challenge. The gridscale battery energy storage system space is very nascent — similar to where solar was 15 years ago. There are no large, commissioned projects yet. Bankers are hesitant to fund projects with 10-12-year horizons due to a lack of performance data."

there's "Additionally, little incentive for developers to buy from Indian manufacturers. For example, in solar, we had a 40 per cent import duty on modules to promote local manufacturing, plus an ap-proved vendor list for public sector projects. In the battery sector, the differential in duties is minimal — 5 per cent vs 10 per cent. And there's no approved vendor list yet. This makes it easier for developers to source entirely from China," he said.

FUTURE OF STORAGE

When asked about the company's funding plan, he said it is a mix of debt and equity, currently.

"We are covered for this financial year. We are planning to raise the next round in first quarter (Q1) next year, most likely through the private market."

"There is a lot happening

in the industry, and (there's) a lot of noise. We're currently participating in several tenders. The future of this industry is massive," he said.

"In the next 24 months, India will need about 36 GWh of battery storage. In five years, that figure could rise to 200 GWh. That's a six-fold increase in capacity," he added.

On whether this target was very ambitious, he said, "Absolutely. Under our Glasgow commitments, 50 per cent of our energy is supposed to come from renewables by 2030. To support this, storage is essential."

OTHER FACTORS

The Ministry of Power is already pushing for energy storage to become a part of dispatchable renewable energy systems, what's now being called CFD-RE (confirmed/firm dispatchable renewable energy). "Storage isn't optional anymore — it's inevitable," he said.

On the impact of trade tensions between the US and China, he said, "What happens between the US and China regarding trade does throw concerns for us, too. There are vulnerabilities in the supply chain — disruptions, tariffs and currency fluctuations."

"This industry (energy storage) relies heavily on imports. For example, in 2023, our imports alone were close to \$4 billion," he said.

"For example, an author recently asked, 'Are we just moving oil money from the Middle East to lithium money in China?' That highlights the core issue. Policymakers are trying to address this holistically'," he said.

"They have implemented measures like the Circular Technology Compliance Board (CTCB), mandating extended producer responsibility, particularly for recycling. They're trying to ensure that waste doesn't just end up in landfills," added Rajaraman.

"In the next 24 months, India will require around 36 GWh of battery storage. In five years, that demand could soar to 200 GWh," says **Venkat Rajaraman** CEO of Cygni Energy, in conversation with **businessline**. As the demand for clean energy accelerates, battery storage will play a vital role in building a reliable, green grid.

Read the full article

The smarter E India Conference



Cygni Energy at REconnect Summit 2025 – Jaipur Edition 🔔

Cygni Energy participated in the **REconnect Summit 2025** – Jaipur Edition, took place on 30th May 2025 at Clarks Amer Hotel, Jaipur. Our Head of Strategy & Investments, Mr. <u>Gautam Patil</u>, joined a distinguished panel for the session titled: 'Solar + Energy Storage in Rajasthan', alongside key voices from across the renewable energy ecosystem.

This summit is a key platform for industry leaders to come together, exchange ideas, and shape the future of clean energy in India—particularly in a state as pivotal as Rajasthan.

Let's power a cleaner, smarter tomorrow—together!

EFY Expo- Pune 2025



Our CEO, <u>Venkat Rajaraman</u>, recently spoke at <u>EFY Expo Pune 2025</u> on 15th May. His session on 'Empowering Energy: The Role of Electronics and AI in Revolutionizing Battery Energy Storage Systems' sparked thought-provoking discussions and inspired many in the energy and tech communities. A big thank you to the EFY team and all those who joined the session and engaged with us!

Read More about the Session

India Energy Storage Alliance (IESA) Membership



Bronze Member



We sincerely thank you for renewing the membership and for continuing to place your trust in us. Your ongoing support is greatly valued, and we look forward to serving you in the year ahead.

IESA Member Since 2023



Cygni Energy has renewed its membership with <u>India Energy Storage Alliance (IESA)</u>! we've been proud to partner with IESA in advancing India's energy storage ecosystem. IESA's support has been invaluable, and we look forward to continuing our collaboration on transformative, nation-building initiatives in sustainable energy.

SBICAPS Research Report- Returns Charge Ahead As Battery Prices Discharge



SBICAPS released a report on BESS titled "Returns Charge Ahead As Battery Prices Discharge". Few interesting highlights from the report:

- Power exchanges observed an unprecedented market bifurcation in May '25. Spot prices for
 electricity during solar hours plummeted to Rs. 0/unit, while non-solar peak hour prices
 grazed the Rs. 10/unit ceiling. This divergence highlights an extreme case for the economic
 viability and practical necessity of ESS.
- India has minuscule BESS capacities at present. Given challenges posed by VRE to the grid and diurnal supply/demand incoherence, capacity is expected to **expand meteorically to**

208GWh by Mar 2030.

- FDRE landscape favours traditional players with generally higher IRRs, even as new players storm the BESS space
- Critical preceding steps should include incentives for pack and BESS manufacturing, increased duty on imports of containerised systems, zero import duty on battery manufacturing equipment, a reduced GST of 5% on critical BESS components, and a gradual increase in DCR content.

Download the Report Here

Cygni's Industry-Leading Storage Solutions



2.5MWh air cooled storage

- 20" container design
- 1332V / 1884Ah system rating
- 16S module-based design
- > 8000 cycle life
- 20 years of calendar life
- Up to 1 MW backup for 2 hours
- Fire suppression system

5.1MWh liquid cooled storage

- 20' for 5.016 MWh solution
- 1331.2V / 3768Ah
- 104S module-based design
- > 8000 cycle life
- 20 years of calendar life
- Up to 2.5MW backup for 2 hours
- Fire suppression system

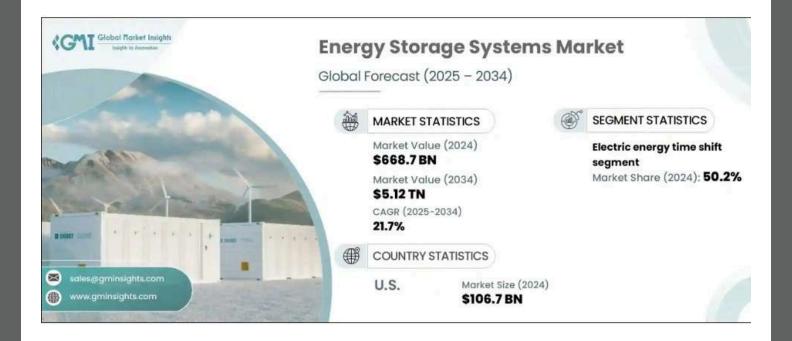
Cygni's energy storage solutions provide a cost-effective and significant benefits for Large Scale BESS System:

- 12+ Year Warranty: An industry-leading warranty that supports long-term financing options, akin to solar solutions.
- Local Service Network: A robust network of service technicians ensures maximum system uptime and reliability.
- Custom Solutions: Tailored energy solutions designed to optimize return on investment (ROI).

For inquiries, contact us at info@cygni.com.

Catalogue Here

Report-Energy Storage Systems Market



The global energy storage systems market was estimated at USD 668.7 billion in 2024 and is expected to reach USD 5.12 trillion by 2034, growing at a CAGR of 21.7% from 2025 to 2034, driven by the increasing integration of renewable energy sources, advancements in battery technology, and the rising demand for grid stabilization and energy efficiency. ESS plays a crucial role in modernizing the power infrastructure, enhancing energy security, and supporting the transition to a sustainable energy future. Increasing transition towards green energy is driving the market growth. Global renewable energy generation capability is predicted to enhance by more than two times by 2030.

Download The Report

Industry News

Acceleration of BESS begins in India!



Rajasthan will now allow captive renewable plants to increase up to 200% of contract demand by installing Battery Energy Storage Systems (BESS).

Some other points to note:

- ✓ BESS capacity should store 20% of generation from the additional capacity
- New STU connected renewable projects > 5MW should have 2 hours of storage or 5% of project capacity
- ✓ Transmission and wheeling charges exemptions for discharge from BESS during non-solar peak hours.

Our containerised BESS solutions are already powering large-scale applications and this policy shift only strengthens the case for broader deployment.

Read Here

CATL Unveils the First 9MWh Ultra-Large Capacity BESS



CATL's 9MWh TENER Stack has literally opened another dimension of BESS innovation with its vertical stacking of two 20-foot containers.

As BESS moves from 3XX to 5XX or 7XX and higher capacity LFP cells to drive up the energy density of containers there are practical limits to this including:

- ♦ Transportation & Handling: Existing 5MWh liquid cooled containers already weigh 45T while Envision's 8MWh (currently holding the record for a 20' container) weighs 55T
- ♦ Voltage and Safety: Higher MWh will require operating above 1500VDC which is the threshold for many safety certifications like UL1973 or NFPA 855

♦ Cost impact: Systems above 1500V have more stringent requirements for insulation, creepage / clearance, testing etc which increases component costs

Read Here

Upcoming Activity





EV Update Telangana Summit

We are thrilled to announce our participation in the "EV Update Telangana Summit 2025" happening on 27th June 2025 in Hyderabad!

Know more

Entrepreneur's India EV 20205 Show

Cygni is thrilled to be part of **Entrepreneur's India EV Show 2025 – Expo & Conference**.

Join us as we explore the next wave of innovation in electric mobility!

Know More

Saturdays Fun & Energy Activity

Our team unwinds and connects over indoor games and activities at Munch & Mingles.

Because great work comes from happy minds!



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CYGNI ENERGY PVT. LTD., SURVEY NO.306, PLOT NO.5, EMC MAHESHWARAM INDUSTRIAL AREA, MAHESHWARAM, HYDERABAD-501359





