







Cygni's 20-foot liquid cooled container designs allow fast, flexible deployments in rugged Indian conditions and are engineered for high availability, round trip efficiency and a calendar life of up to 25 years.



# CYGNICAMZ NEWSLETTER - NOV 2025

#### Dear Team, Partners & Stakeholders,

This month marks a defining chapter for Cygni Energy as we advance breakthrough technologies, strengthen market adoption, and scale our manufacturing vision. We proudly launched India's largest-capacity Sodium-Ion Battery Pack, placing Cygni in the high-voltage battery league for Sodium Ion batteries and opening new possibilities for cost-efficient, climate-resilient mobility. Our 240 kWh and 261 kWh BESS deployments in Bengaluru and Hyderabad further demonstrated how storage is now a core power technology. At Reconnect Summit 2025, we deepened industry collaboration and policy visibility. We also celebrated Thanksgiving Day, reinforcing our culture of gratitude. Cygni is not observing the transition — we are architecting it. Looking forward to your feedback on this Nov month's Newsletter.

Warm regards,
Venkat Rajaraman
Founder & CEO
Cygni Energy Pvt. Ltd.

## **Cygni In The News**

Cygni Energy has Officially Launched India's Largest-Capacity Sodium-Ion Battery Pack!



At Cygni, we have always believed that no single battery chemistry can win it all. Each application demands the right technology — and today, we're thrilled to unveil India's largest-capacity, certification-ready Sodium-Ion battery pack, built for next-generation mobility and heavy-duty commercial applications. With this breakthrough, Cygni proudly enters the High-Voltage Club in Sodium Ion batteries, marking a major leap forward in India's advanced energy storage landscape.

This innovation represents the next frontier in sustainable, high-performance energy storage, reinforcing our mission to accelerate India's transition toward a decarbonized, electrified future.

#### Pack Highlights (324V | 90Ah | 29 kWh)

- 120–150 km range per charge
- 1-hour fast charging
- 4000+ cycles with fast charging
- Only 15% capacity loss at –20°C to +55°C
- Efficient thermal performance operates safely without liquid cooling
- Lower degradation at high temperatures
- Superior cycle life in harsh conditions
- Automotive-grade locking connectors
- IP67-rated ingress protection
- Imagine charging the same pack 2–3 times a day and still achieving a 5-year lifespan!

If you're an EV OEM or battery-swapping operator interested in validating this pack — let's connect! info@cygni.com. If you're a drivetrain components manufacturer, we welcome collaboration to co-develop Sodium-Ion drivetrains and accelerate adoption.

Cygni - 240 kWh BESS Installation in Bangalore



Cygni Energy successfully deployed a 240 kWh Battery Energy Storage System (BESS) at a reputed educational institute in Bangalore, designed to enable seamless off-grid operation and reliable backup support. During daytime, the solar energy simultaneously powers the campus load and charges the battery, ensuring that once solar production tapers off, the BESS continues supplying uninterrupted power—resulting in minimal to zero grid dependency.

Model Name: Slim Stack

Description-Cygni Slim Stack—a compact, modular 51.2 kWh energy storage unit, scalable up to 250 kWh through parallel stacks for future capacity expansion.

Specifications:

Nominal capacity: 512V 100Ah

Rated energy: 51.2kWh

Rated power: 50kW

• Cooling: Passive cooled

• Cycles: 6000+

This installation empowers the institute to significantly cut electricity bills through peak-shaving, reduces CMD charges, and enables expanded rooftop solar utilization by storing surplus generation for later use. A strong example of how advanced storage solutions can deliver energy reliability, cost efficiency and sustainability under a single roof.

**Cygni's Industry-Leading Storage Solutions** 

#### RESIDENTIAL & COMMERCIAL SOLUTIONS

#### RESIDENTIAL SOLUTIONS



#### Cygnet 100W

Nominal rating: 51.2V 100Ah Rated energy: 5.12kWh Rated power: 5kW Cycle life: 6,000

Paralleling: Up to 4 packs to get 20kWh



#### Cygnet 100R

Nominal rating: 51.2V 100Ah Rated energy: 5.12kWh Rated power: 5kW Cycle life: 6,000

Paralleling: Up to 8 packs to get 40kWh



#### Reliable LFP Battery Solutions

- Local service for all components including inverters
- Superior round trip efficiency
- Can be integrated with existing Solar solutions
- Ultra long life cycle LFP cells

Complete powering solutions and customizable as per the demand

#### **COMMERCIAL SOLUTIONS**



#### Slim Stack (51.2kWh)

Nominal rating: 512V 100Ah Rated energy: 51.2kWh Rated power: 50kW Cycle life: 6,000 Paralleling: up to 250 kWh

**Know More** 

Cygni - 261 kWh BESS Installation in Hyderabad



Cygni Energy commissioned a **125 kW** / **261 kWh Liquid Cooled BESS system** for a commercial establishment in Hyderabad, developed specifically to support **peak shaving and energy cost optimization for commercial and industrial operations**. Built to manage high load cycles efficiently, the installation helps reduce dependency on expensive peak-hour grid power by strategically discharging stored energy during tariff spikes, resulting in substantial electricity bill savings and demand management benefits.

The system is powered by **Cygni Power Stack (261 kWh)** — a fully integrated, liquid-cooled energy storage solution engineered for efficiency, reliability and outdoor operation. Designed with a **plug-and-play architecture**, it ensures seamless deployment and is compatible with both **PCS and hybrid inverter setups**, depending on energy flow requirements.

#### **Key Technical Specifications:**

Nominal Capacity: 832V, 314AhCooling System: Liquid-cooled

• Cycle Life: 8000+ cycles

#### **Key Features:**

- 1. Bidirectional PCS for charge-discharge flexibility
- 2. Advanced thermal management system for superior efficiency
- 3. **Integrated fire protection** for enhanced safety
- 4. **Humidity control** to ensure stable operation in outdoor environments

This installation stands as a strong example of how high-performance BESS technology can empower commercial sectors to manage demand charges, cut electricity expenses, and operate more sustainably through intelligent energy storage.



Cygni Energy proudly participated in **Reconnect Summit 2025**, gaining valuable insights into emerging innovations and engaging with industry leaders in the evolving energy storage ecosystem. Our CEO, **Mr. Venkat Rajaraman**, was invited as a panelist for a discussion on *Powering Tamil Nadu – Driving C&I and Rooftop Solar Growth*, where he spoke on the *Adoption of Battery Energy Storage in the C&I segment*.

Events like these are powerful platforms to connect with **like-minded professionals**, exchange ideas, and driving the future of the **battery and renewable energy industry**.

# **Industry News**

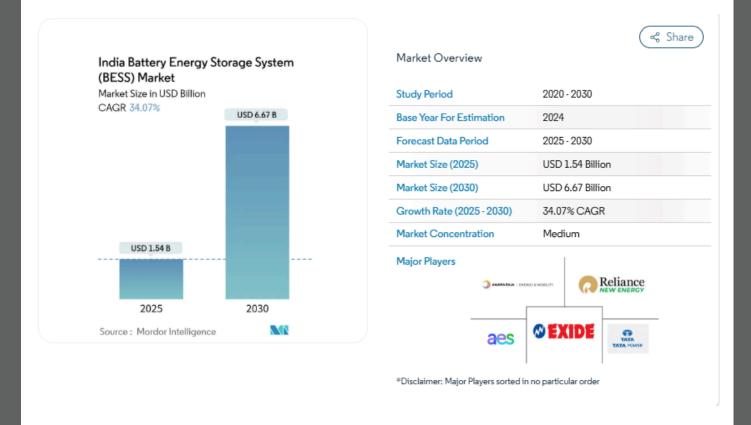
# India to boost energy storage 12-fold to 60 GW by FY32, eyes ₹5 trillion investment



India's energy storage sector is set to grow by over 12 times to 60 GW by FY32, driven by a massive increase in variable renewable energy (VRE) and the need to maintain grid stability, according to an SBICAPS report.

Read More

**India BESS Market Size & Share Analysis - Forecast** 



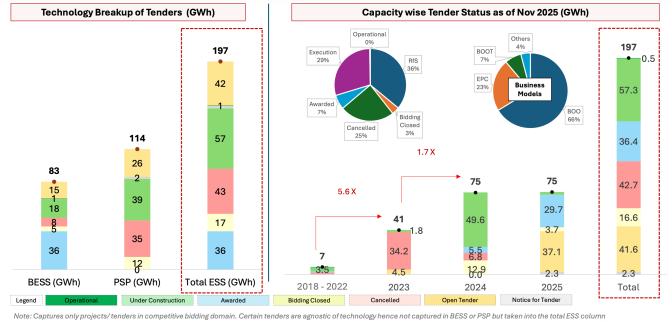
The India Battery Energy Storage System Market size is estimated at USD 1.54 billion in 2025, and is expected to reach USD 6.67 billion by 2030, at a CAGR of 34% during the forecast period (2025-2030).

#### Key Report Takeaways

- By battery type, lithium-ion batteries captured 92.3% of India's battery energy storage systems market share in 2024 and are projected to advance at a 36.7% CAGR through 2030.
- By connection type, on-grid utility installations led with 78.9% share in 2024, while off-grid deployments are set to grow at a 38.2% CAGR to 2030.
- By component, battery packs and racks commanded 58.1% of the India battery energy storage systems market size in 2024; energy-management software is projected to expand at a 39.5% CAGR to 2030.

#### Download Full Report

India Energy Storage Market Overview: Nov 2025 Update



vote: Captures only projects/ tenders in competitive blooms and centering contain. Certain tenders are agriculted to technology nence not captured in BESS of PSP but taken into the total ESS countril

Updated till 29 November 2025

As of Nov 2025, 75 GWh of BESS Capacity tenders (excluding cancelled tenders) has been shared of which 55 GWh are awarded and/or in various stages of execution and 20 GWh is in tendering process. Read the IESA report for Nov '25 below

Read IESA BESS Market Report Nov '25 here

**Upcoming Energy Storage and Utility Events in India (2026)** 

Event Name	Date	Location	Key Focus Areas
India Energy Week (IEW)	Jan 27– 30	Goa	Entire energy value chain, including storage
5th India Battery Manufacturing & Supply Chain Summit	Feb 5	Hyderabad	Battery manufacturing, raw materials, logistics
India Smart Utility Week (ISUW)	Mar 10– 14	New Delhi	Smart grids, utility automation, energy storage integration
Stationary Energy Storage India (SESI)	Mar 17	N/A	Stationary energy storage solutions
12th India Energy Storage Week (IESW)	May 5	New Delhi (Yashobhoomi, IICC)	International conference and expo on energy storage, e-mobility

### Upcoming Events Details

# **Cygni- BESS Product Catalogue**



Download Here

#### **Celebration- Thanksgiving Day**

At Cygni, we believe in celebrating people, values, and togetherness — and this month, our teams came together to mark **Thanksgiving Day** and **Men's Day** with warmth, appreciation, and gratitude. The celebrations reflected the true spirit of Cygni — where every individual is valued, every effort is recognised, and every moment of connection strengthens our culture. From thoughtful conversations to team engagement activities, the day was filled with energy, smiles, and heartfelt appreciation for the men who contribute to Cygni's growth, innovation, and purpose every single day. These celebrations remind us that beyond technology and milestones, it is our people who make Cygni truly powerful.



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