

04	Industry Drivers
07	Industry Challenges
09	Key Initiatives by Major Players

Rubix Industry Insights

BATTERY ENERGY STORAGE SYSTEM (BESS)

India's BESS market is gaining momentum, driven by rising energy demand, increasing renewable energy integration, supportive government initiatives, and growing investments in energy storage infrastructure.

Executive Summary

- The share of BESS in India's required energy storage power capacity is expected to increase from ~54% in FY2026-27 to ~64% in FY2031-32.
- The share of BESS in India's total energy storage requirement is expected to increase from ~42% in FY2026-27 to ~57% in FY2031-32.
- 8.2 GWh of new BESS capacity was added between January and June 2026, compared to less than 100 MWh during the corresponding period of 2025.
- Momentum has picked up. At the end of August 2026, 167.58 GWh of BESS capacity was either under construction, awarded, or under tender.
- Gujarat and Rajasthan dominate India's installed utility-scale BESS capacity with nearly 44% share each.
- Energy storage obligations, the 10% proposed battery storage mandate, VGF support, ISTS Charge Waiver, and the PLI scheme are all supporting the industry's growth.
- High dependence on imports of lithium-ion batteries, falling tariffs, growing tender-auction gaps, and grid connectivity and transmission bottlenecks pose challenges to the industry.
- BESS requirement is expected to increase from 34.72 GWh in FY2026-27 to 236.22 GWh by FY2031-32, i.e., by almost seven times. The estimated investment requirement is INR 3.49 trillion to INR 4.79 trillion.



Battery Energy Storage System (BESS) Industry Scenario

Battery Energy Storage Systems (BESS)



BESS vs. Pumped Hydro Storage (PHS)

	BESS	PHS
 Technology	Electrochemical (battery-based)	Mechanical (water-based)
 Gestation period	Short	Long
 Site requirements	Flexible (modular)	Site-specific (limited locations)
 Scalability	High	Constrained
 Deployment timeline	Faster	Longer
 Suitable for	Short-duration energy storage	Long-duration energy storage

Battery Energy Storage Systems (BESS) are electrochemical storage systems that store electricity and discharge it when required, providing flexibility to balance electricity supply and demand. BESS can support applications such as peak-load management, frequency regulation, ancillary services, energy arbitrage, and grid reliability. While BESS is particularly valuable for integrating variable renewable energy sources such as solar and wind by storing surplus generation and supplying power when renewable output

is low, its applications extend beyond renewable energy to transmission and distribution networks, conventional power systems, microgrids and backup power. Compared to Pumped Hydro Storage (PHS), which has longer gestation periods and is constrained by site availability and geographical requirements, BESS is emerging as a preferred solution for short-duration energy storage due to its modular design, scalability, faster deployment, and shorter project implementation timelines.

BESS to dominate storage capacity and energy requirements by FY2031–32

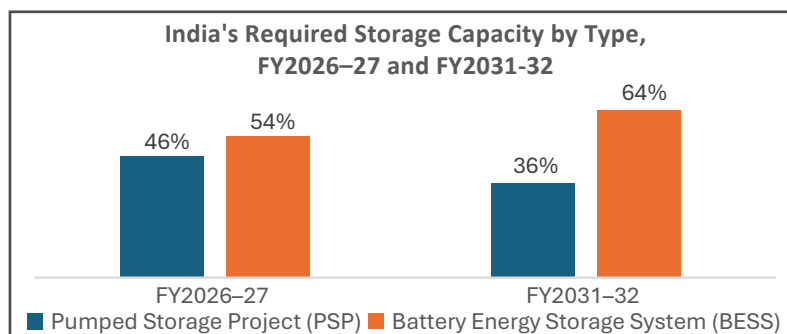
Required Storage Power Capacity (GW)	FY2026–27	FY2031–32
Total	16.13	73.93
• Pumped Storage Project (PSP)	7.45	26.69
• Battery Energy Storage System (BESS)	8.68	47.24
Required Energy Storage (GWh)	FY2026–27	FY2031–32
Total	82.37	411.4
• Pumped Storage Project (PSP)	47.65	175.18
• Battery Energy Storage System (BESS)	34.72	236.22

Source: Central Electricity Authority, National Electricity Plan 2022-32 (Volume 1- Generation), 2023

Note: Required Storage Power Capacity (GW) indicates the maximum power that the storage systems need to supply to the grid at a given time.

Required Energy Storage (GWh) indicates the total amount of electricity that the storage systems need to store and deliver over a period of time.

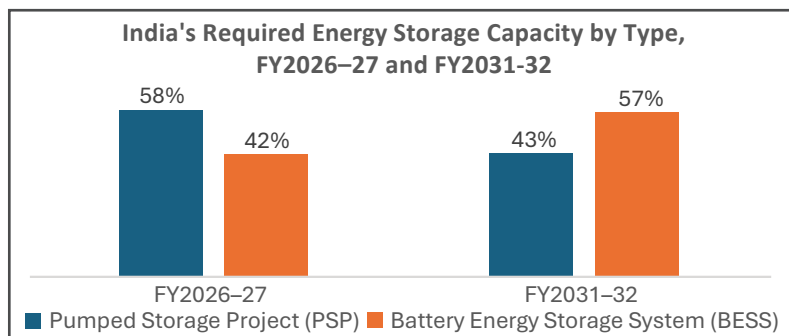
According to the estimates of the generation planning studies in the Central Electricity Authority's National Electricity Plan 2022-32, India's required energy storage power capacity is projected to increase from 16.13 GW in FY2026–27 to 73.93 GW by FY2031–32, driven by the increasing integration of renewable energy and the need for greater grid flexibility. BESS is expected to account for an increasing share of this requirement, rising from ~54% (8.68 GW) in FY2026–27 to ~64% (47.24 GW) by FY2031–32, highlighting its growing importance in India's future power system.



Source: Central Electricity Authority, National Electricity Plan 2022-32 (Volume 1 - Generation), 2023

Note: Required Storage Power Capacity (GW) indicates the maximum power that the storage systems need to supply to the grid at a given time.

India's total energy storage requirement is projected to increase from 82.37 GWh in FY2026–27 to 411.40 GWh by FY2031–32. Within this, BESS is expected to increase nearly seven-fold, from 34.72 GWh in FY2026–27 to 236.22 GWh by FY2031–32, increasing its share of total energy storage requirements from ~42% to ~57% over the same period. The substantial increase in BESS energy capacity reflects the growing requirement for flexible, dispatchable storage to manage increasing renewable energy penetration and shifting electricity demand patterns.



Source: Central Electricity Authority, National Electricity Plan 2022-32 (Volume 1 - Generation), 2023

Note: Required Energy Storage (GWh) indicates the total amount of electricity that the storage systems need to store and deliver over a period of time.

Over the longer term, the Central Electricity Authority (CEA) projects India's total energy storage requirement to reach 320 GW/2,380 GWh by 2047, comprising 230 GW/1,840 GWh of BESS and 90 GW/540 GWh of PSP. BESS would, therefore, account for approximately 77% of the total storage requirement in energy terms (GWh) by 2047, making it important to support renewable energy integration and provide greater flexibility to India's power system.

BESS deployment accelerates from a low installed base

- Against the projected BESS requirement of 34.72 GWh by FY2026–27, India's operational BESS capacity stood at 9.08 GWh as of 31 August 2026¹, equivalent to around 26% of the projected energy-storage requirement.
- In 2026, the pace of deployment has nevertheless accelerated significantly, with 8.2 GWh of new BESS capacity added during January–June 2026, compared to less than 100 MWh during the corresponding period of 2025, according to Mercom India Research's Q2 and 1H 2026 Energy Storage Landscape report. This sharp increase highlights the rapid transition of India's BESS market from early-stage deployment towards larger-scale commercial adoption².
- In addition, deployment is gathering momentum, with a further 167.58 GWh of BESS capacity either under construction (79.92 GWh), awarded (24.13 GWh), or under tendering (63.53 GWh), at the end of August 2026. This substantial pipeline provides a strong foundation for scaling up BESS deployment, although timely project execution, financing, domestic manufacturing, and supporting grid infrastructure will remain important to translate the pipeline into operational capacity.

Status of BESS in India (≥ 1 MWh) as on 31.08.2026		
Project Category	Number of Projects	Capacity (GWh)
In Operation*	18	9.08
Under Construction**	63	79.92
Awarded Projects	23	24.13
In Tendering Stage***	83	63.53
Total	187	176.66

Source: Central Electricity Authority and India Energy Storage Alliance (IESA)

*The In Operation project capacity also includes projects which are grid-connected and participating in merchant sale.

**All the projects with Power Purchase Agreement (PPA)/Battery Energy Storage Purchase Agreement (BESPA) signed are considered under construction.

***Also includes Firm and Dispatchable Renewable Energy (FDRE) projects whose storage capacity (BESS or PSP) is yet to be finalised.

“I believe that India can become a global manufacturing hub for BESS, from batteries and inverters to software and control systems.”

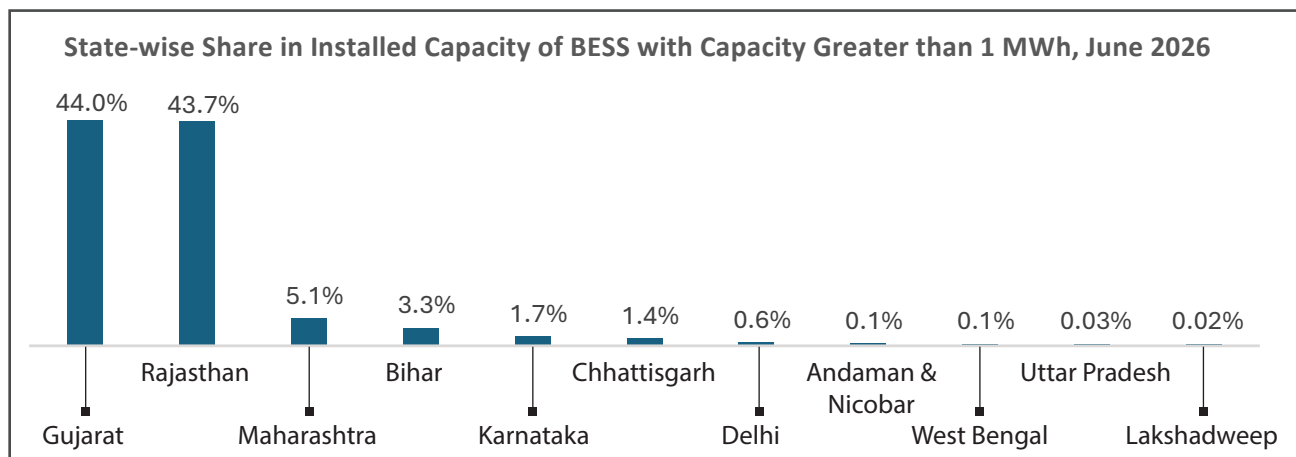
Shri. Pralhad Joshi,

Hon'ble Union Minister of Education, Consumer Affairs,
Food and Public Distribution, and New and Renewable Energy

¹ Central Electricity Authority and India Energy Storage Alliance (IESA)

² Financial Express, September 2026

Gujarat and Rajasthan dominate India's installed utility-scale BESS capacity with nearly 44% share each



Source: Ministry of Power, July 2026. Note: All Figures are rounded off to the nearest decimal.

Gujarat and Rajasthan together account for nearly 88% of India's installed utility-scale BESS capacity, indicating strong geographic concentration. This is not surprising, as Gujarat and Rajasthan also account for the highest shares of installed renewable energy capacity, with 18% and 17% share, respectively, at the end of August 2026.

As of June 2026, BESS installations exceeding 1 MWh had been commissioned across 11 states and union territories,

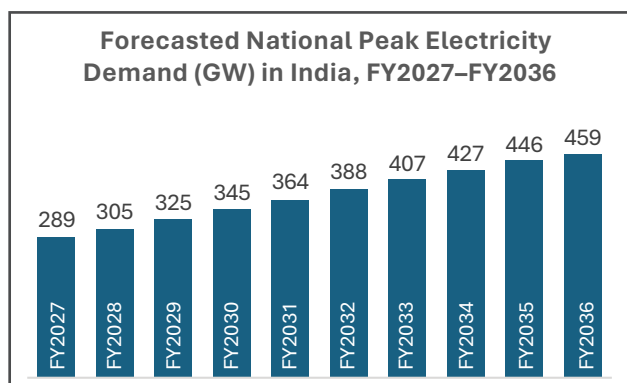
with Gujarat leading with a 44.0% share, closely followed by Rajasthan at 43.7%. Maharashtra ranked third with 5.1%, while Bihar, Karnataka, and Chhattisgarh together accounted for a further 6.4%. The concentration in Gujarat and Rajasthan reflects their strong renewable energy base and growing need for storage to support renewable integration and grid flexibility. The remaining states and UTs collectively accounted for less than 1% of installed capacity, indicating significant scope for geographic diversification as BESS deployment expands.

Key Industry Drivers

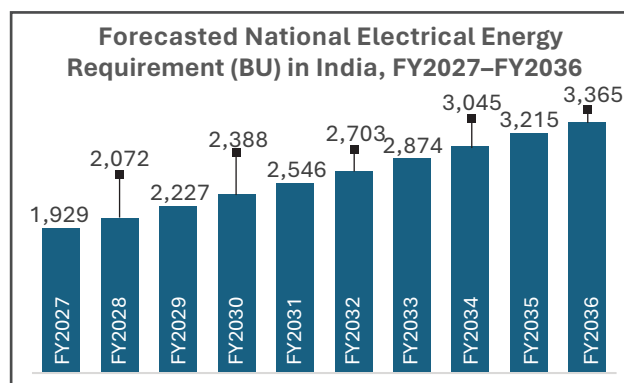
Driver	Impact		
	1–2 years	3–5 years	6–10 years
Key External Drivers			
 Rising peak power demand strengthens the need for BESS flexibility	High	High	High
 Falling lithium-ion battery costs can accelerate BESS deployment	High	High	High
 Rapid renewable expansion strengthens India's need for BESS flexibility	High	High	High
Major Government Initiatives			
 Energy Storage Obligation creates a mandated demand base for BESS	High	High	High
 Proposed storage mandate could significantly accelerate BESS deployment	High	High	High
 State-level initiatives are supporting BESS deployment	High	High	High
 VGF support reduces BESS costs and improves project viability	High	High	Medium
 ISTS charge waiver improving BESS project economics	High	High	Medium
 PLI scheme strengthens domestic battery supply for BESS	High	High	Medium

Rising Peak Power Demand Strengthens the Need for BESS Flexibility

According to the Central Electricity Authority's Long Term National Resource Adequacy Plan, India's peak electricity demand is projected to increase from 289 GW in FY2026–27 to 459 GW by FY2035–36, a 58.8%



increase, while annual electrical energy requirement is projected to rise from 1,929 BU to 3,365 BU, a 74.4% increase. The substantial growth in electricity demand over the next decade is expected to increase the need for flexible power resources, with BESS supporting peak-demand management, energy shifting, and balancing of variable renewable generation.



Source: Central Electricity Authority's Long Term National Resource Adequacy Plan (2026–27 to 2035–36)

Falling Lithium-ion Battery Costs Can Accelerate BESS Deployment

Technology	Round-trip efficiency	Life span	Advantages
Lithium-ion	88%–90%	10–15 years	High specific energy and high load capabilities with power cell
Sodium-Sulphur battery storage	75%–85%	10–15 years	Low-cost potential; inexpensive raw materials and sealed, no-maintenance requirement
Nickel Cadmium Battery	60%–80%	10–15 years	Rugged, high cycle count with proper maintenance
Vanadium Redox flow Batteries	70%–75%	5–10 years	Deep-discharge capability and scalable energy capacity
Lead-acid Batteries	60%–70%	3–6 years	Low-cost and simple manufacturing, low cost per watt-hour

Source: Central Electricity Authority, National Electricity Plan 2022–32 (Volume 1- Generation), 2023

Declining lithium-ion battery prices are improving the cost competitiveness and commercial viability of BESS, particularly for grid-scale and renewable energy applications. Global lithium-ion battery pack prices fell to around USD 108/kWh in 2025, while prices for battery packs used in stationary storage declined to approximately USD 70/kWh, a 45% reduction from 2024³. Within lithium-ion technologies, Lithium Iron Phosphate (LFP) battery prices fell by more than 15% in 2025, compared to less than 5% for Lithium Nickel Manganese Cobalt Oxide (NMC) batteries, making LFP batteries on average more than 40% cheaper than NMC alternatives⁴. The lower cost, high thermal stability and long cycle life of LFP make it particularly suitable for stationary energy storage, where cost, safety, and durability are critical; consequently, LFP accounted for more than 90% of BESS deployments

globally. Lithium-ion batteries also offer high round-trip efficiency of 88–90%, a 10–15 year operating life and high power density, making them well suited for grid-scale applications. Continued cost reductions are, therefore, expected to improve BESS project economics and accelerate deployment in India.

Rapid Renewable Energy Expansion Strengthens India's Need for BESS Flexibility

India's target of achieving 500 GW of non-fossil fuel-based installed capacity by 2030, alongside the goal of 50% of cumulative installed power capacity from non-fossil sources, is expected to significantly increase the need for energy storage. India now ranks third globally in installed renewable energy capacity⁵, with the rapid

³ Bloomberg Finance L.P., December 2025

⁴ International Energy Agency (IEA), February 2026

⁵ News on Air, May 2026

expansion of solar and wind further strengthening the case for BESS. For example during H1 2026, India added a record ~29 GW of solar and wind capacity, comprising around 26 GW of solar and 2.9 GW of wind, with solar installations increasing 43% YoY⁶. The growing share of variable renewable generation will require flexible storage solutions to balance supply and demand, store surplus renewable power, and discharge electricity when renewable generation declines. Thus, India's ambitious renewable capacity expansion and 2030 non-fossil energy targets are expected to be a major driver of BESS deployment and grid flexibility.

Energy Storage Obligation Creates a Mandated Demand Base for BESS

India's Energy Storage Obligation (ESO) requires distribution licensees (DISCOMs) to procure a specified share of electricity consumption through energy storage systems, creating a direct policy-driven demand for storage. The ESO is scheduled to rise progressively from 1% in FY2023–24 to 4% by FY2029–30⁷, requiring DISCOMs to increasingly integrate energy storage into their power procurement strategies. The growing obligation is expected to provide greater demand visibility for BESS developers and support investments in battery-based storage projects.

Proposed Storage Mandate Could Significantly Accelerate BESS Deployment

India plans to mandate battery storage for all new solar and onshore wind projects commissioned from July 1, 2027, with storage equivalent to at least 10% of project capacity for two hours. The requirement is proposed to become more stringent from July 2029, when the minimum storage duration would increase to four hours while retaining the 10% capacity requirement⁸. The proposed mandate would create a significant policy-driven demand catalyst for BESS while improving the dispatchability of renewable power and reducing grid balancing challenges. If implemented, it would complement the existing ESO and accelerate BESS deployment alongside India's rapidly expanding renewable energy capacity.

State-Level Initiatives are Supporting BESS Deployment

State-level initiatives are playing a greater role in BESS deployment. Gujarat and Rajasthan, the two largest states with BESS installed capacity, are strengthening their regulatory frameworks, with Gujarat developing Grid Interactive BESS Regulations, 2026, while Rajasthan has notified dedicated BESS Regulations, 2026 and is facilitating small-scale decentralised standalone BESS procurement through tariff-based competitive bidding under the Build-Own-Operate (BOO) model. Other states are also building momentum. Maharashtra has incorporated storage into its Renewable Energy & Energy Storage Policy 2025-26 to 2035-36, while Andhra Pradesh has finalised a 1.2 GWh BESS project with Solar Energy Corporation of India Limited (SECI). Karnataka and Madhya Pradesh have also received 2 GWh and 1.5 GWh, respectively, under the Power System Development Fund-backed Viability Gap Funding programme (PSDF-backed VGF programme), with both states benefiting from Green Energy Corridor infrastructure, indicating that BESS deployment is gradually expanding beyond the current concentration in Gujarat and Rajasthan.

VGF Support Reduces BESS Costs and Improves Project Viability

Government-backed Viability Gap Funding (VGF) is improving the economic viability of BESS projects by reducing upfront capital requirements and lowering the cost of storage. The original VGF scheme, approved in 2023, provided INR 3,760 crore of budgetary support for 4 GWh of BESS, with funding of up to 40% of project capital cost; declining battery prices subsequently enabled the supported capacity to increase to 13.2 GWh within the same budget⁹. In June 2025, the government announced an additional VGF scheme covering 30 GWh of BESS, taking the total BESS capacity targeted for support under VGF schemes to approximately 43.2 GWh¹⁰ (this represents supported/targeted project capacity and should not be interpreted as installed or commissioned BESS capacity). The expansion of VGF support is expected to improve project bankability, encourage private investment, and accelerate deployment of BESS needed for renewable energy integration and peak-demand management.

“If we are to build a truly flexible grid, deployment must accelerate further because the requirement is no longer measured only in gigawatts. It is measured in our ability to respond instantly to changing system conditions.”

Shri. Shripad Yesso Naik

Hon'ble Minister of State for Power and New & Renewable Energy

⁶ Down to Earth, July 2026

⁷ Ministry of New and Renewable Energy

⁸ Reuters, September 2026

⁹ Ministry of Power, April 2025

¹⁰ Ministry of Power, June 2025

ISTS Charge Waiver Improving BESS Project Economics¹¹

The 100% waiver of Inter-State Transmission System (ISTS) charges for eligible co-located BESS projects commissioned by June 30, 2028 reduces the cost of transmitting stored renewable power across states. This improves the economic viability of BESS projects and encourages the co-location of storage with solar and wind generation, particularly in renewable-rich states. The policy also facilitates the interstate transfer of stored renewable electricity, supporting greater integration of variable renewable energy into the grid.

PLI Scheme Strengthens Domestic Battery Supply for BESS

The Ministry of Heavy Industries is administering the

Production Linked Incentive (PLI) scheme under the “National Programme on Advanced Chemistry Cell (ACC) Battery Storage,” approved in May 2021, with an outlay of INR 181 billion to establish 50 GWh of domestic ACC manufacturing capacity. Of the targeted 50 GWh capacity, 40 GWh had been awarded to four beneficiary firms as of February 2026, supporting the development of a domestic battery manufacturing base for applications including BESS¹². In July 2026, the government specifically earmarked 10 GWh of ACC manufacturing capacity for Grid-Scale Stationary Storage applications, directly supporting the country’s growing energy-storage requirements¹³. The initiative is expected to reduce the dependence on imported battery cells, strengthen domestic supply chains, and potentially lower BESS costs over time.

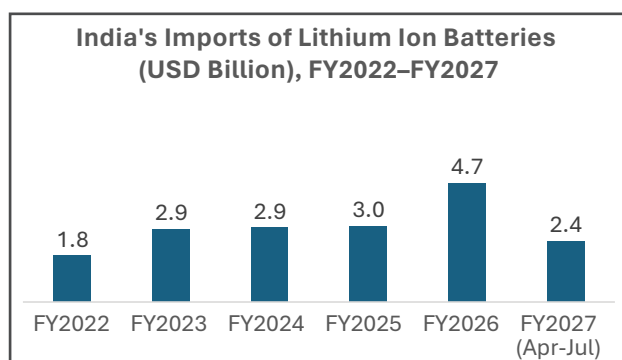
Major Industry Challenges

Challenge	Impact		
	1–2 years	3–5 years	6–10 years
 High dependence on imports creates BESS supply Chain risks	High	High	High
 Falling tariffs are creating viability risks for standalone BESS projects	High	High	High
 Limited financing and execution capability could delay BESS projects	High	High	High
 Growing tender–auction gap creates BESS deployment uncertainty	High	High	Medium
 Grid connectivity and transmission bottlenecks could slow BESS deployment	High	High	Medium

High Dependence on Imports Creates BESS Supply Chain Risks

India’s BESS industry remains heavily dependent on imported lithium-ion batteries and battery cells, exposing developers to global price fluctuations, exchange-rate movements and supply-chain disruptions. Imports of lithium-ion batteries and accumulators increased from USD 3.0 billion in FY2025 to USD 4.7 billion in FY2026, a 56% increase, highlighting the rapidly growing reliance on overseas battery supplies. China accounted for around 75% of India’s imports in FY2025, with its share rising further to 84% in FY2026, resulting in a high concentration of supply from a single country. This dependence exposes BESS developers to shipping disruptions, geopolitical risks, and sudden changes in battery prices, which can increase project costs and affect timelines. Although India is expanding domestic battery-cell manufacturing, continued reliance on imports remains a key supply-chain

challenge for the BESS industry.



Source: Ministry of Commerce and Industry. Note: HS 8-digit code 85076000 considered for analysis. All figures are rounded off to the nearest decimal.

Falling Tariffs are Creating Viability Risks for Standalone BESS Projects¹⁴

Developers are winning standalone BESS projects by

¹¹ Ministry of Power, July 2025

¹² Ministry of Heavy Industries, February 2026

¹³ Ministry of Heavy Industries, July 2026

¹⁴ Institute for Energy Economics and Financial Analysis (IEEFA), May 2026



bidding very low tariffs, but some may find it difficult to build and operate them profitably at those prices. In 2025, the lowest tariff for a 2-hour BESS system fell to INR 1.48 lakh/MW/month, compared to an indicative benchmark of INR 2.3 lakh/MW/month. Thus, BESS tariffs declined by more than 71% between 2022 and 2025, while battery pack prices fell by only 36%, widening the gap between project revenues and underlying costs. In fact, nearly 75% of allocated 2-hour BESS capacity is classified as “at risk”, indicating potential challenges in recovering project costs.

Limited Financing and Execution Capability Could Delay BESS Projects¹⁵

India's BESS sector is expanding rapidly, but the ability of developers to secure financing and execute large-scale projects remains a significant constraint. According to an IEEFA-JMK Research study, only 46.3% of the 10.4 GW of standalone BESS capacity allocated in 2025 was awarded to developers with standalone BESS execution capabilities. The study also found that investors typically expect 15%–20% IRR, while project implementation delays of 9–18 months may arise from financial closure, procurement, and commissioning challenges.

Growing Tender–Auction Gap Creates BESS Deployment Uncertainty¹⁶

Battery storage procurement expanded sharply during H1 2026, with 28 GW of capacity tendered, an 86% YoY increase from 15 GW in H1 2025. However, auctioned

capacity declined by 18% YoY to 9 GW, from 11 GW, indicating that the rapid growth in tenders is not translating proportionately into completed auctions. This widening gap points to uncertainty around viable tariffs, project economics, and procurement structures, which could slow the conversion of the tender pipeline into actual BESS projects.

Grid Connectivity and Transmission Bottlenecks Could Slow BESS Deployment

Rapid growth in BESS and renewable capacity is increasing the need for timely grid connectivity and transmission infrastructure. Nearly 21 GW of renewable capacity was operating through temporary grid connections in 2026, with around 12 GW facing power-evacuation restrictions during peak solar generation, highlighting the mismatch between generation growth and transmission readiness¹⁷. During FY2026, around 6,900 GWh of renewable electricity could not be evacuated because generation projects became operational before the associated transmission systems were ready¹⁸. At the same time, Central Transmission Utility of India Ltd (CTUIL) has received renewable connectivity applications exceeding 500 GW, putting further pressure on available grid capacity¹⁹. Delays in connectivity, substations, and evacuation infrastructure could postpone BESS commissioning and increase project costs. However, the expected completion of key interstate transmission networks by 2027 should help reduce curtailment and improve grid integration²⁰.

¹⁵ Institute for Energy Economics and Financial Analysis (IEEFA), May 2026

¹⁶ Mercom India

¹⁷ The Indian Express, July 2026

¹⁸ TV18 Broadcast Limited / CNBC TV18, August 2026

¹⁹ Ministry of Power, March 2026

²⁰ TV18 Broadcast Limited / CNBC TV18, August 2026

Key Initiatives by Major Players

Company	Brief Description
Amara Raja Energy & Mobility / Amara Raja Advanced Cell Technologies	● 5 GWh BESS manufacturing facility planned: Amara Raja Advanced Cell Technologies, a wholly owned subsidiary of Amara Raja Energy & Mobility Limited is setting up a 5 GWh BESS facility, with estimated capex of INR 2.8 billion targeting the start of production in Q4 FY2027. ● Partnering for BMS localisation: In July 2026, Amara Raja Advanced Cell Technologies signed a MoU with Nuvation Energy to jointly explore the localisation and large-scale manufacturing of high-voltage Battery Management System (BMS) platforms in India. The collaboration will have an initial focus on grid-scale storage, Commercial and Industrial (C&I) systems, and renewable energy integration
AmpereHour Solar Technology Private Limited /AmpereHour Energy	New 5 GWh facility inaugurated: In July 2026, the company inaugurated a BESS manufacturing/integration facility at Chakan, Pune, with planned annual capacity of 5 GWh. It will manufacture/integrate cabinet and containerised battery DC-AC blocks for utility and commercial and industrial (C&I) applications.
Invergy Limited	Commissioning of 3 GWh automated BESS gigafactory: In June 2026, the company inaugurated its BESS facility at Dasna, Uttar Pradesh. The 217,000 sq ft fully automated facility has an annual capacity of 3 GWh and involved investment exceeding INR 2,000 million which manufactures BESS, LFP battery packs, solar inverters, and integrated storage systems.
Mecpower Solutions Limited	5 GWh BESS assembly facility in Gujarat: In July 2026, the company signed an MoU with the Government of Gujarat for a proposed 5 GWh BESS assembly facility at Karjan, involving approximately INR 1,600 million investment with the facility intended for utility-scale and commercial applications.
Solex Energy Limited	● INR 40 billion integrated solar cell + BESS manufacturing project: In May 2026, the company announced signing of an MoU with Gujarat for a 5 GW solar cell facility and 10 GW BESS manufacturing facility, with investment of around INR 40 billion. The BESS capacity is planned in phases, initially 5 GW + 5 GW. ● Incorporation of BESS subsidiary: In June 2026, the company incorporated Solex BESS Pvt. Ltd. as a wholly owned subsidiary as a part of its energy-storage expansion indicating that BESS is being developed as a separate strategic business vertical, rather than merely an extension of solar EPC.
Vikram Solar Limited / VSL PowerHive Private Limited	Entry into integrated BESS manufacturing: In December 2025, Vikram Solar announced establishing VSL PowerHive as its energy-storage arm with Phase 1 involving INR 43.7 billion capex, with a planned 5 GWh BESS assembly facility and 7.5 GWh integrated cell + BESS facility. The 5 GWh BESS assembly facility is being developed at Oragadam, Tamil Nadu.
Waaree Energies Limited / Waaree Energy Storage Systems (WESS)	INR 100 billion planned capex: In April 2026, Waaree Energies announced its BESS capabilities being built out with a planned capacity of 20 gigawatt hours with phase one of 3.5 GWh expected in FY2027 and phase two of 16.5 GWh by next financial year. The total capex outlay is approximately INR 100 billion.

*Note: Selected latest initiatives available in the public domain have been considered for selected major players. Initiatives are arranged in company-wise alphabetical order.
Source: Company press releases, news sources, investor presentations etc.*

Outlook

As per the National Electricity Plan (Generation) notified in May 2023, India's BESS requirement is projected to increase from 34.72 GWh in FY2026–27 to 236.22 GWh by FY2031–32. Against this requirement, 9.08 GWh of BESS capacity was operational as of 31 August 2026, representing around 26% of the FY2026–27 requirement. However, the development pipeline is substantial, with 79.92 GWh under construction, 24.13 GWh awarded, and 63.53 GWh under tendering, taking the total operational and identified project capacity to 176.66 GWh, with the current CEA project pipeline scheduled for commissioning till FY2029–30. In capacity terms, this

represents approximately 75% of the NEP's projected FY2031–32 requirement, although the identified capacity is at different stages of development and is not yet fully operational. The estimated investment requirement for BESS by FY2031–32 is around INR 3.49 trillion, highlighting the substantial investment opportunity associated with India's energy-storage expansion²¹. Separately, the India Energy Storage Alliance (IESA) estimates that the broader energy-storage sector could attract around INR 4.79 trillion in investment by 2032, reflecting the scale of investment expected across India's expanding storage ecosystem²².

Period	Present In-Operation/ Commissioned Projects in the coming years (GWh)	Under Construction Projects to be Commissioned in the Coming Years (GWh)	Awarded Projects to be Commissioned in the Coming Years (GWh)	Under-Tendering Projects to be Commissioned in the Coming Years (GWh)	Total Capacity by Expected Commissioning Year (GWh)
Up to March 2025	0.22	0.00	0.00	0.00	0.22
FY2025-26	0.57	0.00	0.00	0.00	0.57
FY2026-27	8.29	18.07	0.00	0.00	26.36
FY2027-28	0.00	50.28	10.96	12.84	74.07
FY2028-29	0.00	11.58	7.17	50.69	69.44
FY2029-30	0.00	0.00	6.00	0.00	6.00
Total	9.08	79.92	24.13	63.53	176.66

Source: Central Electricity Authority

India's BESS market is poised for strong growth, supported by rising industry investments in domestic battery manufacturing and BESS projects, alongside a substantial project pipeline. Government initiatives such as Viability Gap Funding (VGF), the National Programme on Advanced Chemistry Cell (ACC) Battery Storage, ISTS charge waivers, and supportive renewable-energy policies are helping improve project viability and encourage private-sector participation. Growing investments across battery manufacturing, system integration, and grid-scale storage are expected to strengthen domestic capabilities and support the expansion of the BESS ecosystem. As

the most recent development, the Union Cabinet has approved the INR 1.86 trillion PM-DHARA (PM-Developing Harmonized and Accelerated Renewable-energy Access) Scheme, which includes a dedicated allocation of INR 500 billion for deploying 50 GWh of BESS by FY2032–33. The BESS component is intended to address renewable-energy intermittency, transmission congestion, and peak-hour curtailment, while facilitating the evacuation of up to 135 GW of renewable energy²³. With rising energy-storage requirements and continued policy and industry support, India's BESS market offers significant long-term growth and investment opportunities.

“With BESS and advanced EMS emerging as the backbone of a flexible power grid, targeted incentives to reduce upfront capital costs will be critical to accelerating energy storage deployment and enabling this transition.”

Mr. Agush Misra,
Co-Founder & CEO, AmpereHour Energy

²¹ Ministry of Power, July 2026

²² Business Standard, April 2025

²³ DD News, September 2026



ABOUT RUBIX

Rubix Data Sciences Pvt. Ltd. helps you to take prudent credit risks, build a robust supply chain and monitor compliance for your business partners in India and around the world. Rubix helps you collect payments in time from your debtors, helping generate predictable cash flows.

Set up by highly experienced Risk Professionals, the company has been recognised at the IMC Digital Technology Awards in 2020 for the Rubix ARMS™ platform, and in 2021 for the Rubix Early Warning System (EWS). Rubix has also received the prestigious ET BFSI Exceller Award three times in a row: in 2023 for its ground-breaking analytics initiative, 'SME Income Range Estimation and Financial Ratio Benchmarking', in 2024 for the Rubix Risk Scoring Model, and in 2025 for Rubix Nexus Check.

Rubix has been appointed as India's first Validation Agent for the Legal Entity Identifier (LEI) by Legal Entity Identifier India Ltd, the Local Operating Unit accredited by the Global Legal Entity Identifier Foundation (GLEIF), Switzerland.

The Rubix ARMS™ and Early Warning System (EWS) platforms and their suite of reports, products and services are based on Rubix's extensive database of structured and unstructured data aggregated from over 120+ sources, customised predictive analytics and proprietary technology.

Corporate Office:

D - 424, Neelkanth Business Park, Vidyavihar (West), Mumbai - 400086, India

Ahmedabad | Bengaluru | Bhopal | Bhubaneswar | Chandigarh | Chennai | Delhi NCR | Hyderabad | Indore | Jaipur | Kanpur | Kolkata | Lucknow | Nagpur | Patna | Pune | Raipur | Rajkot | Ranchi | Surat | Thiruvananthapuram | Vadodara | Visakhapatnam

follow us



© 2026 Rubix Data Sciences Private Limited. All rights reserved.

[Privacy Policy](#) | [Disclaimer](#)

The Rubix Industry Insights Team

INDUSTRY DATA & ANALYTICS

Rubix Data Sciences

RESEARCH

Yogesh Jambhale

EDITOR

Lakshmi Subramanian

DESIGN

Chandan Naik

BUSINESS DEVELOPMENT

Tushar Bhaskar

✉ tushar.bhaskar@rubixds.com

☎ +91-9999064524

CUSTOMER SERVICE

✉ info@rubixds.com

☎ +91-22-49744274

MARKETING & MEDIA QUERIES

Rahul Chopadekar

✉ rahuL.chopadekar@rubixds.com

☎ +91-9819735111

If you'd like to learn more about Rubix's Solutions, please visit www.rubixds.com or contact us via info@rubixds.com