India's Battery Manufacturing Capacity Projected to Reach 100 GWh by Next Year: Experts

REI Expo 2025 & TBSI 2025 brings global leaders together for clean energy growth.

Delhi, November 3, 2025: India's battery manufacturing capacity stands at nearly 60 GWh and is projected to reach 100 GWh by next year, **said Mr. Nikhil Arora, Director, Encore Systems.**

Arora said that with automation efficiencies crossing 95% and advanced six-axis robotics handling 625Ah, 12kg cells, we are driving large-scale localization in the energy storage value chain. Our sodium-based cell technologies, safer, highly recyclable and ideal for grid-scale storage reflect India's growing self-reliance in clean energy.

"Collaborations with IIT Roorkee, NIT Hamirpur and local automation partners are accelerating innovation and technology transfer. As storage costs fall from ₹1.77 to ₹1.2 per unit in five years, India is set to achieve cost parity between solar and storage, advancing its journey toward energy independence." Arora said while speaking at the **18th Renewable Energy India Expo in Greater Noida.**

The 18th Renewable Energy India (REI) Expo and the 3rd The Battery Show India (TBSI), organized by Informa Markets in India, served as a crucial platform to strengthen global collaboration, innovation and investment in the clean energy ecosystem. These prestigious shows on innovative renewable energy and battery solutions brought together manufacturers, innovators, investors and policymakers.

Speaking at the event, **Mr. Ankit Dalmia, Partner, Boston Consulting Group, said** "*India's next five years will be shaped by advances in battery storage, digitalization, and green hydrogen. New emerging chemistries such as LFP, sodium-ion and solid-state batteries could cut storage costs by up to 40% by 2030, enabling 24×7 renewable power. AI-driven grid management and smart manufacturing are improving reliability and reducing system costs by nearly 20%. The National Green Hydrogen Mission, targeting 5 million tonnes of production annually by 2030, is positioning India to capture about 10% of global green-hydrogen capacity."*

"With the right policy support, manufacturing scale-up and global partnerships, India can become a resilient, low-cost hub for clean energy and battery innovation. India's clean-energy ecosystem represents a US$200–250 billion investment opportunity this decade, with targets of 500 GW of renewables and 200 GWh of storage by 2030. Investors are focusing on hybrid RE + storage, grid-scale batteries, and pumped storage projects, while companies leverage AI and digital twins for smarter grid integration. Despite policy and land challenges, strong momentum and falling costs are powering rapid growth." he further added.

Mr. Arush Gupta, CEO, OKAYA Power Private Limited, *said" OKAYA has powered over 3 million Indian households with its inverter and power backup solutions and is now accelerating its presence in solar and lithium storage. With a new ₹140 crore facility coming up in Neemrana, we're scaling both lithium and inverter production to meet growing residential demand. Solar is projected to contribute nearly 40% of our business within the next five years, driven by initiatives like the PM Suryaghar Muft Bijli Yojana. As India targets 1 crore solar-powered homes, our focus is on providing efficient, digitally enabled rooftop solutions built on indigenous technology. By integrating advanced BMS and power electronics, we aim to make every Indian household energy independent and future-ready."*

Acharya Balkrishna, Head, Patanjali, said *"At Patanjali, our vision has always been to contribute to the nation's development and people's prosperity through Swadeshi solutions be it in health, wellness, or daily essentials. Extending the same philosophy to renewable energy, we are committed to advancing solar and battery technologies that reduce foreign dependence and make clean energy affordable for all. Solar energy, a divine and continuous source, holds the key to meeting India's growing power needs at minimal cost. Through Swadeshi-driven innovation and collaboration, we aim to ensure that sustainable and economical solar solutions reach every household in the country."*

Mr. Inderjit Singh, Founder & Managing Director, INDYGREEN Technologies, said *"We provide customized battery solutions across L5, C&I, and utility-scale BESS segments, designed to balance performance, scale, and economics for Indian customers. With over 100 battery assembly lines successfully implemented, we aim to expand multifold in the next two years, targeting over 20 GWh of battery lines and 20 GW of solar PV manufacturing solutions. Leveraging IoT and AI-driven technologies, we enhance battery safety, thermal management, and lifecycle efficiency while supporting OEMs and Tier 1 suppliers with advanced insulation and fire-safety systems. Additionally, we're enabling India's industrial lithium cell ecosystem through pilot-line infrastructure for premier institutes and labs, alongside showcasing high-efficiency solar cell lines and large-scale BESS assembly solutions at REI and The Battery Show India."*

Mr. Chetan Srinivasa, Business Development Manager, EV Projects, IPG Photonics India, said *"At IPG Photonics, our laser-based manufacturing technologies are at the core of India's energy transition, enabling reliable, high-performance, and safe battery production the backbone of EV growth and renewable grid stability. Our next-generation YLS AMB Laser series with Dual-Beam Adjustable Mode Beam technology, combined with the HPS D33 High Power Scanner and LDD-700 monitoring system, delivers unmatched precision, zero-defect welding, and 100% quality traceability. These innovations enhance battery efficiency, lifespan, and safety while supporting supply chain localization and the Make in India vision. Through close collaborations with local OEMs, automation firms, and research institutes, we're helping build a self-reliant ecosystem that positions India as a global hub for advanced battery and energy storage manufacturing."*

Kozi Mizuno, COO, Tex Technology, said *"India holds immense potential to lead the next phase of global energy transformation, especially in the field of battery technology. Our approach is to closely understand the needs of Indian users and*

recommend the most suitable technologies that enhance grid stability and support the nation's clean energy goals. With the recent collaboration between the Japanese and Indian governments to advance technological innovation, we are actively exploring partnerships with local universities and research centers to accelerate battery innovation and adoption. Given India's rapid economic growth and strong policy support, this industry is poised for significant expansion in the next five years."

Mr. Anil Kumar, CEO, Nash Energy said, *"The Indian market presents a strong opportunity for domestic manufacturers, particularly with potential government support and duty structures that can help balance price competitiveness with Chinese suppliers. Participating in REI offers us valuable exposure to key clients who integrate our cells into their battery packs. While it's still the initial phase, we're gathering crucial insights that will translate into meaningful business growth in the near future. We are also set to introduce new form factor cells, including prismatic cells, by next year, which will further strengthen our product portfolio and cater to evolving industry needs."*

Sharing perspective on the co-located expos, **Mr. Yogesh Mudras, Managing Director, Informa Markets in India,** said, "*India's clean energy transition is accelerating faster than ever, with renewable capacity surpassing 250 GW in 2025 and a strong pipeline targeting 500 GW by 2030. The Ministry of Power has approved a ₹5,400 crore Viability Gap Funding (VGF) scheme for 30 GWh of Battery Energy Storage Systems (BESS), in addition to 13.2 GWh already underway, which is expected to attract ₹33,000 crore in investments by 2028.*