

## Global PV Energy Storage Information - Solar, Battery & Smart Grid Insights

# Expected ROI of standalone energy storage project in India 2025





#### **Overview**

Is India a leader in energy storage innovation?

The Stationary Energy Storage India (SESI) 2025 conference brought together 200+ global leaders, signaling robust policy, investment, and innovation momentum. With national and international collaboration, India is positioning itself not only as a leader in renewable energy deployment but also as a major force in energy storage innovation.

How many GW of energy storage systems have been tendered?

According to a new report from JMK Research and the Institute for Energy Economics and Financial Analysis (IEEFA), tenders for standalone energy storage systems (ESS) comprised 64% (6.1GW) of the total capacity put out to competitive solicitation between January and March of this year.

How is India advancing energy storage solutions?

At the heart of this momentum is the strategic push by the Government of India and various state authorities, backed by institutions like SECI, NTPC, and SJVN, to advance energy storage solutions. A landmark initiative includes the approval of Viability Gap Funding for 13,200 MWh of battery energy storage systems by 2030-31.

How will India's energy landscape change in the next 5 years?

ia's clean energy transitionIndia's energy landscape will transform in the next five years, driven by Battery Energy Storage Systems (BESS supporting renewable projects. This shift will position India as a global lead.

How much does a battery energy storage system cost in India?

"In recent auctions, battery energy storage system tenders in Maharashtra and Rajasthan secured tariffs as low as IR219,000-221,000 per megawatt (MW) a month (US\$2,561-US\$2,586/MW/month), representing almost a 40% reduction compared with non-VGF projects with similar specifications,"



Sharma said.

Does India's national electricity plan predict a rise in storage demand?

India's National Electricity Plan forecasts a steep rise in storage demand—411.4 GWh by 2031-32, with significant contributions from both pumped storage and battery systems. Costs have decreased dramatically, enhancing the sector's commercial viability.



#### **Expected ROI of standalone energy storage project in India 2025**



## "Battery energy storage market in India is on the cusp of ...

The next five years will witness a transformative shift in India's energy landscape, positioning the country as a global leader in energy storage innovation, says ...

### India's Govt Boosts Battery Energy Storage: Rediff Moneynews

India's 2nd VGF tranche will boost standalone Battery Energy Storage Systems (BESS) development, aiming for 30 GWh capacity by 2028. Rs 5400 crore investment expected.



#### India Eyes Rs 4.79 Lakh Cr Investment In Energy Storage By 2032: SESI 2025

The energy storage sector in India is expected to witness an investment of INR4.79 lakh crore (INR 479 thousand crore) by 2032, according to industry leaders at the 5th edition of ...

## Energy Storage Rides a Wave of Growth but Uncertainty Looms: ...



This report comes to you at the turning of the tide for energy storage: after two years of rising prices and supply chain disruptions, the energy storage industry is starting to see price ...







### Govt's Second VGF Tranche to Propel Standalone ...

The India Energy Storage Alliance (IESA) has welcomed the government's announcement of the second tranche of viability gap funding (VGF) aimed at advancing the development of standalone Battery Energy Storage ...

### INDIGRID INVESTMENT MANAGERS LIMITED

Mumbai / Delhi, Friday, 4th April 2025: IndiGrid [BSE: 540565, NSE: INDIGRID], India's leading power sector Infrastructure Investment Trust (InvIT), today proudly announced the ...





### Battery Storage is here: A game-changer for India's ...

Energy storage is projected to grow 5x between 2026 and 2032 with an estimated investment of `4.79 lakh crore (\$55 billion) by 2032.



### Government's Second Tranche of VGF: A Boost for Standalone

. . .

India's leading industry body, the India Energy Storage Alliance (IESA), has welcomed the government's announcement of the second tranche of the Viability Gap Funding ...





## IndiGrid Commissions India's First Regulated Utility-Scale Standalone

IndiGrid, a power sector Infrastructure Investment Trust (InvIT), has announced the commissioning of India's first regulated utilityscale standalone Battery Energy Storage ...

#### NLC, Bondada, Oriana Win Tamil Nadu's 500 ...

NLC, Bondada, Oriana Win Tamil Nadu's 500 MW/1,000 MWh Battery Storage Auction Tamil Nadu Green Energy Corporation Ltd. has awarded 500 MW/1,000 MWh of standalone battery storage projects to NLC India ...



### Energy Storage Rides a Wave of Growth but Uncertainty ...

The energy storage sector maintained its upward trajectory in 2024, with estimates indicating that global energy storage installations rose by more than 75%, measured by megawatt-hours ...





### Govt's 2nd VGF boosts battery energy storage ...

Industry body India Energy Storage Alliance on Wednesday hailed the government's announcement of the second tranche of the viability gap funding to boost the development of standalone Battery Energy Storage ...





#### India's Energy Storage Revolution: A June 2025 Deep Dive

As a passionate observer of Battery Energy Storage Systems (BESS), witnessing the rapid acceleration and strategic advancements in June 2025 has been nothing short of ...

## Figure 1. Recent & projected costs of key grid

Meanwhile, the costs of pumped hydro storage are expected to remain relatively stable in the coming years, maintaining its position as the cheapest form - in terms of \$/kWh - ...







## India set to add 30 GW of storage by 2027, outpacing demand ...

India is projected to add 30 GW of new energy storage capacity by June 2027 through standalone and firm and dispatchable renewable energy (FDRE) projects, according to ...

### The Standalone Energy Storage Market in India 1

In the first quarter of 2025, Standalone ESS tenders reached 6.1 gigawatts (GW), which accounted for 64% of all utility-scale energy storage tenders, which included all other use ...





## IndiGrid commissions regulated utility-scale standalone BESS project

IndiGrid has commissioned India's first regulated utility-scale standalone battery energy storage system (BESS) project in Delhi with a capacity of 20 MW/40 MWh. The project, ...

### India's First Utility-Scale Standalone Battery Energy ...

NEW DELHI, 8 May, 2025 -- The GEAPP Leadership Council (GLC) today officially announced the launch of India's first utility-scale, standalone Battery Energy Storage System (BESS) project, the largest of its kind in South Asia. ...







## BESS Support Grows: VGF Scheme Expanded for 30 GWh in India ...

Share this: VGF Scheme Expands to Support 30 GWh of New Standalone BESS Development in India In a major policy push to support grid-scale energy storage, the ...

### IndiGrid Commissions 20MW BESS Project in Delhi

IndiGrid has commissioned a 20 MW/40 MWh battery energy storage system (BESS) project in Delhi, making it India's first regulated utility-scale standalone BESS project.





### Energy Storage Systems (ESS) Overview

3 ??? The challenge with Renewable Energy sources arises due to their varying nature with time, climate, season or geographic location. Energy Storage Systems (ESS) can be used for storing available energy from Renewable ...



### The Standalone Energy Storage Market in India 1

Standalone Energy Storage Systems (ESS) are rapidly emerging as a key market, with 6.1 gigawatts of tenders issued in the first quarter of 2025 alone, accounting for 64% of the total ...





### "Battery energy storage market in India is on the cusp

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The next five years will witness a transformative shift in India's energy landscape, positioning the country as a global leader in energy storage innovation, says Saurabh Kumar, vice president-India, GEAPP (Global Energy ...

## India's installed battery storage capacity reached 219.1 MWh as ...

The recently released Mercom report expects India to add 1.6 GWh of standalone battery energy storage systems and 9.7 GW of renewable projects plus energy storage by 2027.



### India: 'Critical inflection point' for standalone energy ...

National and regional agencies in India tendered for 9.5GW of utility-scale energy storage in the first quarter of 2025, with more than two-thirds for standalone systems.





### India's First Commercial Utility-Scale Battery Energy ...

New Delhi, 08 May 2024 -- In a significant step forward for India's energy transition, the Delhi Electricity Regulatory Commission (DERC) has granted regulatory approval of India's first commercial standalone Battery Energy ...





### The Standalone Energy Storage Market in India

The Standalone Energy Storage Market in India is rapidly growing, with 6.1 GW of tenders issued in Q1 2025, accounting for 64% of total utility-scale energy storage activities. Despite ...

### India set for 12-fold increase in energy storage capacity to 60

India is set for a substantial expansion in energy storage capacity, with projections suggesting a 12-fold increase to approximately 60 GW by FY32, according to an ...







### India awarded 2.2 GW of standalone battery storage ...

India awarded 5.4 GW of co-located solar plus battery energy storage systems (BESS) and 2.2 GW of standalone BESS to developers in the first half of 2025. This marks the nation's highest BESS allocation to date, says ...

### **Energy Storage: Connecting India to Clean Power on ...**

Executive Summary The rapid expansion of renewable energy has both highlighted its deficiencies, such as intermittent supply, and the pressing need for grid-scale energy storage ...



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