

India Solar Energy Market Forecast 2025-2032

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Report description:

KEY FINDINGS

The India solar energy market is expected to grow at a CAGR of 14.21% during the forecast period, 2025-2032. The base year considered for the study is 2024, and the estimated period is between 2025 and 2032.

India has reached a major milestone by surpassing 100 GW of installed solar capacity, solidifying its position as the world's fourth-largest solar market-trailing only China, the United States, and Germany. With its ambitious renewable energy goals and strong policy backing, India is on track to become the third-largest solar market globally in the near future.

MARKET INSIGHTS

The country's solar sector has seen extraordinary growth over the past decade, leaping from just 3 GW in 2014 to 100 GW in 2024. This progress has been driven by supportive government policies, substantial domestic and foreign investments, and a clear national focus on clean energy. Key initiatives like the PM Surya Ghar Muft Bijli Yojana and PM-KUSUM are significantly accelerating solar adoption across residential, agricultural, and industrial segments.

Looking ahead, India plans to add 35-40 GW of new solar capacity in the upcoming financial year, with projections of 40-45 GW in 2026-27. This growth will be fueled by the increasing scale of utility projects and the rising demand from commercial and industrial (C&I) users seeking clean energy solutions. India's rapid solar expansion not only reflects its leadership in the global energy transition but also reinforces its commitment to meeting national climate goals and building a sustainable energy future.

SEGMENTATION ANALYSIS

The India solar energy market includes the segmentation analysis of technology and application. The technology segment is further categorized into solar photovoltaic (PV) and concentrated solar power (CSP).

India's solar energy market has seen remarkable growth, with solar photovoltaic (PV) technology at the forefront of this transformation. As of March 31, 2024, the country's total installed solar PV capacity stood at approximately 81.81 GW, encompassing ground-mounted systems, grid-connected rooftop installations, and off-grid solutions.

This rapid expansion has been fueled by a combination of favorable government policies, continuous technological innovation, and steadily declining solar panel costs. Landmark initiatives such as the Jawaharlal Nehru National Solar Mission (JNNSM), along with a range of state-level programs, have played a critical role in accelerating the adoption of solar PV across residential, commercial, and industrial sectors.

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