

Expected ROI of rooftop solar storage project in India 2025



Overview

Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solars.

Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solars.

Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solars.

I. Introduction India has significant Solar Energy Potential (SEP) with about 5000 trillion units per year energy incident over India's.

The market is expected to grow at a CAGR of 33% from FY25 to FY27, with the total installed rooftop capacity projected to grow from 17 GW in FY25 to ~30 GW by FY27. Gujarat and Maharashtra together account for nearly 41% and 23% share, respectively, in the total installed capacity for rooftop.

As of March 31, 2025, the country had commissioned nearly 85.6 GW of utility-scale solar capacity, with another 68.2 GW in the pipeline following completed auctions. This puts India's total installed solar capacity, when factoring in rooftop and other segments, on track to reach approximately 116.

In 2025, the growth of solar panels, particularly rooftop solar systems, is expected to soar as the country accelerates its efforts to reduce reliance on fossil fuels and embrace cleaner, more renewable sources of energy. India's ambitious renewable energy targets are a testament to the country's.

By March 2025, the number of rooftops solar installations under this scheme is projected to surpass 10 lakhs. The target is to reach 20 lakh installations by October 2025, 40 lakhs by March 2026, and one crore by March 2027. Within just nine months of launching in February 2024, the scheme has.

As of June 2025, India installed rooftop solar capacity stood at 16.5 GW. Gujarat, Maharashtra, UP, Kerala, and Rajasthan led the way in Q2 2025, collectively accounting for 64% of the total installations. India's rooftop solar capacity surged 158 per cent in the first half of 2025, adding 2.8. Will rooftop

solar grow in India by 2025?

By 2025, analysts project that the installed capacity of rooftop solar could reach around 40 GW—up from approximately 10 GW in 2023. This represents a compounded annual growth rate (CAGR) of over 30%. Despite the optimistic outlook, several challenges pose a risk to the anticipated growth of rooftop solar in India.

How much solar capacity will India add in FY 2025?

India is expected to add 22 GW of solar capacity in FY 2025 and 27.5 GW in FY 2026. Residential rooftop solar will grow further, especially with the PM Surya Ghar Muft Bijli Yojana providing free solar electricity to 10 million homes. Domestic solar module production will reach 60 GW by 2025, supported by the PLI scheme.

What is the growth rate of rooftop solar market in India?

With all these factors at play, the rooftop solar market in India is expected to experience robust growth. By 2025, analysts project that the installed capacity of rooftop solar could reach around 40 GW—up from approximately 10 GW in 2023. This represents a compounded annual growth rate (CAGR) of over 30%.

What is the future of solar in India?

The future looks bright. India is expected to add 22 GW of solar capacity in FY 2025 and 27.5 GW in FY 2026. Residential rooftop solar will grow further, especially with the PM Surya Ghar Muft Bijli Yojana providing free solar electricity to 10 million homes.

How will India achieve 1 crore rooftop solar installation in 2026-27?

India aims to achieve 1 crore rooftop solar installation in the residential sector and install 30 GW of cumulative rooftop solar capacity by 2026-27. Launch of the National Portal and the One significant move was the launch of a national portal that functions as an e-marketplace in 2022, by the Ministry of New and Renewable Energy (MNRE).

Does India have a rooftop solar system?

This is a two part article. Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solar. I. Introduction India has significant Solar Energy

Potential (SEP) with about 5000 trillion units per year energy incident over India's land area.

Expected ROI of rooftop solar storage project in India 2025



India's rooftop solar installations to surpass 10 lakh by March 2025

India's rooftop solar initiative PM Surya Ghar Yojana is rapidly transforming the country's energy landscape as it is on track to install over 10 lakh by March 2025. In a ...

Factsheet Details:

The rooftop solar sector also experienced significant growth in 2024, with 4.59 GW of new capacity installed, marking a 53% increase from the year 2023. The PM Surya ...



Monthly RE Update - May 2025

Based on the benchmark costs for solar, wind and storage capacities, the project could involve an investment of INR 1,500 crore. SAEL plans to commission 2.5 GW of ...

India set to hit 30 GW of rooftop PV capacity in fiscal ...

India's installed rooftop solar capacity will reach

25 GW to 30 GW by fiscal 2027 from 17 GW in fiscal 2025, according to CareEdge Advisory & Research.



India Solar Energy Market Highlights - May 2025

India's renewable energy sector surged in May 2025 with major solar and hybrid projects by NTPC, Reliance, Adani, and others, advancing the 500 GW clean energy goal.

India's Rooftop Solar Market to reach 25-30 GW by FY27

India's rooftop solar market is on a robust growth trajectory, driven by increasing energy costs, supportive government policies, and growing corporate commitments toward sustainability.



Daily News Wrap-Up: India's Rooftop Solar Capacity Rose 2.8 GW in 1H 2025

India added 2.8 GW of rooftop solar capacity in the first half (1H) of 2025, according to Mercom India's newly released Q2 2025 India Rooftop Solar Market Report. The ...

Union Budget 2025: Expectations of India's solar industry

With the Union Budget 2025-26 approaching, the solar industry anticipates key policy and financial measures to sustain this momentum. The budget is expected to increase ...



India's installed rooftop solar capacity expected to ...

India's rooftop solar market will grow on an average 33% annually between FY 2025 and FY 2027, reaching an installed capacity of 30 GW by FY27 from 17 GW in FY25, according to a new report by CareEdge ...

Opportunities in India's Solar Energy Sector for 2025

Explore India's booming solar energy sector in 2025 with investment opportunities, government incentives, and green energy compliance.



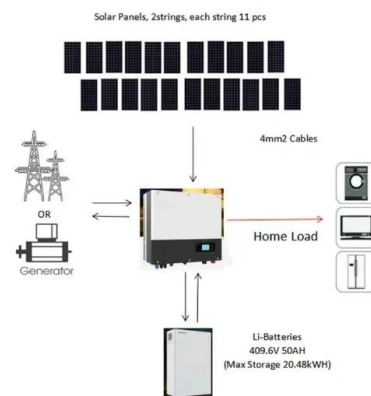
Overview of residential rooftop solar installations in India 2025 ...

Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solars.



India's Solar Surge: Anticipated Installation of 21.2 GW in Fiscal 2025

JMK Research anticipates a robust addition to India's solar capacity in fiscal 2025, slated to reach approximately 21.2 GW by March 31, 2025. This surge will encompass ...



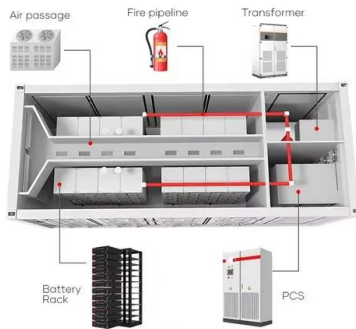
India expected to hit 132 GW of installed solar ...

ICRA expects India to add 22 GW of new solar power generation capacity in FY 2025 and 27.5 GW in FY 2026, taking its cumulative installed PV capacity to 131.5 GW from 82 GW as of March 31, 2024.

Indian Renewable Energy capacity expected to reach 250 ...

Commenting on the capacity addition prospects, Girishkumar Kadam, Senior Vice President & Co-Group Head - Corporate Ratings, ICRA, said: "The healthy renewable ...





India's Rooftop Solar Moment: Strategic Priorities for ...

As grid stability and peak demand challenges grow, promoting battery energy storage systems (BESS) and hybrid rooftop + storage models will future-proof installations and enhance energy

Research

MERCOM INDIA ROOFTOP SOLAR MARKET REPORT Q2 2025 - 1.6 GW INSTALLED IN Q2 2025 India added 2.8 gigawatts (GW) of rooftop solar capacity in the first half (1H) of calendar year (CY) 2025.



Indian budget for FY 2024-25 proposes rooftop solar plan, policy ...

India's fiscal budget for 2024-25 (April-March) on July 23 proposed free electricity under a rooftop solar power plan to grow renewables while promising to boost ...

Harnessing India's rooftop solar potential: A crucial ...

For India to achieve its 600 GW clean energy goal, rooftop solar must become a national priority. By learning from global success stories, addressing financial barriers, and implementing robust policies, India can ...

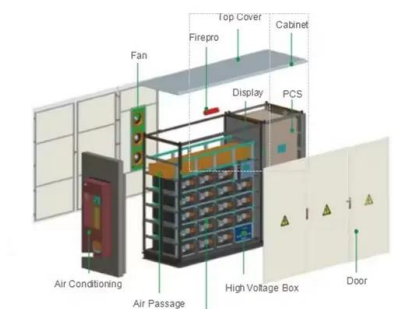


India's Solar Landscape Shifts with Storage, Rooftop, and ...

The fiscal year 2025 alone saw India add 17.4 GW of utility-scale capacity and 5.15 GW of rooftop solar installations. Rajasthan led the race with 6.5 GW added, followed by ...

Global Market Outlook for Solar Power 2025-2029

There are also rising solar stars today. India's comprehensive solar strategy - covered in a dedicated chapter (see p. 60) - is beginning to bear fruit. The most populous ...



India's rooftop solar installations to surpass 10 lakh by ...

India's rooftop solar initiative PM Surya Ghar Yojana is rapidly transforming the country's energy landscape as it is on track to install over 10 lakh by March 2025. In a statement, the Ministry of New and Renewable Energy ...

Rooftop Solar Potential of India in 2025

The potential for rooftop solar in India by 2025 is promising, characterized by rapid growth trends driven by government initiatives, technological advancements, and increasing awareness.



Union budget 2025: A bright future for India's solar industry - EQ

In Short : The Union Budget 2025 boosts India's solar industry with higher allocations, incentives for domestic manufacturing, and expanded rooftop subsidies. It ...

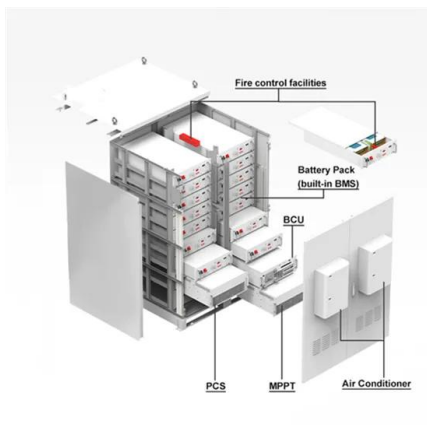
The Growth of Commercial Rooftop Solar in India: A ...

India is rapidly emerging as a global leader in renewable energy, targeting 500 GW of capacity by 2030, with solar power expected to contribute 280 GW. Rising electricity costs and increasing sustainability ...



India solar capacity 2025 Surges with 7.8 GW ...

Between January and March 2025, India installed 7.8 GW of solar capacity, bringing the total to 89.7 GW, according to Mercom India. This includes 70.3 GW of utility-scale solar and 19.4 GW of rooftop solar.



Rooftop Solar: Global Clean Energy Trends and Investment

...

Explore global trends and investment opportunities in rooftop solar energy in Thailand, a key player in clean energy innovation.

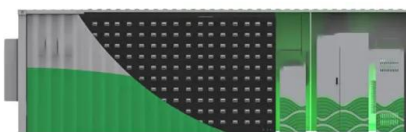


Overview of residential rooftop solar installations in ...

Part 1 deals with an overview of residential rooftop solar installation (January 2025) across the country, and Part 2 will analyse the uptake of rooftop solars.

India Mandates Energy Storage for Future Solar Projects

The integration of energy storage in solar projects represents step towards a sustainable energy future in India. By enhancing grid stability and optimising power supply, this ...





India Mandates Energy Storage for Future Solar Projects

The integration of energy storage in solar projects represents step towards a sustainable energy future in India. By enhancing grid stability and optimising power supply, this initiative supports the country's transition to a low ...

Contact Us

For catalog requests, pricing, or partnerships, please visit:
<https://solar.j-net.com.cn>