



**Espay Solar Energy S.L.**

# **Current status of solar thermal power generation in China**



## Overview

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China installed a record 315 GW (AC) of new solar capacity in 2025, lifting cumulative installed PV capacity to 1.2 TW and pushing non-fossil power sources past thermal generation for the first time. In a recent study published in the journal \*Southern Energy Construction\*, researchers from the China Energy Technology and Economics Research Institute have provided a comprehensive overview of the solar thermal power generation landscape in China. China's National Energy Administration (NEA) released its 2025 power sector statistics on Jan. China's wind and solar power installed capacity totaled 1,840 GW at. China has become a global leader in the development of concentrating solar thermal power (CSP), taking advantage of state support, localized supply chains, and integration within hybrid renewable energy bases. China is the largest market in the world for both photovoltaics (PV) and solar thermal energy. Its PV capacity crossed 1,000 gigawatt (one terawatt, 1 TW) in May 2025. 6GW, accounting for 74%, with wind additions of 9.1GW or 17%, while thermal power only made up 7%, marking a 6% decline yo   Figure 1.

## Current status of solar thermal power generation in China

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### Solar power in China

Overview  
Government incentives  
History  
Solar resources  
Solar photovoltaics  
Concentrated solar power  
Solar water heating  
Effects on the global solar power industry

The China Development Bank provided \$20 billion of financing to domestic solar manufacturers in 2010. In 2011, new feed-in tariffs were promised to potential solar power developers to help drive investments and growth in the solar power market. The government of Qinghai province offered solar projects that were operational before 30 September, 1.15 yuan (\$0.18) for each kWh they produced in May 2011. The National Development and Reform Commission offered same-priced subsidies to potential solar powe...

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### China Advances 42 Solar Thermal Power Projects Under ...

As of now, there are 42 solar thermal power projects under construction or in the planning stages, with the latest developments being closely monitored.



## Research Overview of Solar Thermal Power Technology in China



By analyzing the current status, challenges and development recommendations for solar thermal power generation in China, this article offers systematic theoretical support and practical guidance for ...

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## China's wind, solar capacity exceeds thermal power for first time

SINGAPORE, April 25 (Reuters) - China's wind and solar power generation capacity surged to 1,482 gigawatts by the end of March, exceeding fossil fuel-based thermal power capacity for



## China's Solar Thermal Power Boom: Insights, Challenges, and ...

By analyzing the current status, challenges, and development recommendations for solar thermal power generation in China, the research offers systematic theoretical support and practical ...

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## Concentrating Solar Thermal Power in China: 2025 Review and Outlook

China has become a global leader in the development of concentrating solar thermal power (CSP), taking advantage

of state support, localized supply chains, and integration within ...

Sample Order  
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### China's solar and onshore wind capacity reaches new heights, while

In Q1 2025, China's wind and solar capacity surpassed its thermal (coal and gas) capacity for the first time, supplying nearly 23% of the country's total electricity consumed, up from roughly 18% in Q1 of ...

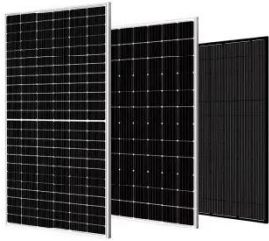
### MONTHLY CHINA ENERGY UPDATE , March 2025 Combined ...

Thermal generation still dwarfs wind and solar generation, but as Ember's co-founder Dave Jones points out, new zero emissions capacity is broadly meeting electricity demand growth, stemming further ...



### China adds 315 GW of solar in 2025 - pv magazine International

China installed a record 315 GW (AC) of



new solar capacity in 2025, lifting cumulative installed PV capacity to 1.2 TW and pushing non-fossil power sources past thermal generation for the ...

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## Solar power in China

The government incentives have also contributed to the curtailment of solar energy, as many of the solar projects have been built in northern and western regions of China where there is a low demand for ...



## China's Wind, Solar Power Installed Capacity Exceeded 1,800 GW for

Wind and solar power surpassed thermal power in terms of installed capacity for the first time ever in the first quarter of last year. As of March. 31, 2025, China's installed capacity of wind and ...

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