

To Provide Safe , Economical and Green Energy!

CosinSolar

CSP

**QUARTERLY UPDATE
2025**

DEVELOPMENT OF CHINA'S CSP INDUSTRY

Phase 1

Scaling Demonstration Projects

In 2016, China's National Energy Administration issued the Notice on the Construction of Solar Thermal Power Demonstration Projects, officially launching the first batch of 20 demonstration projects with competitive feed-in tariffs.

SUPCON SOLAR Delingha 50MW
Molten Salt Tower CSP Plant
Under operation

50MW

Phase 2

Integrated Development of CSP-Wind-Solar Hybrid Systems

Entering the 14th Five-Year Plan period, China initiated the planning and construction of large-scale Wind-PV power bases, with a focus on desert, Gobi, and arid regions.

Jinta ZhongGuang Solar 'CSP + PV'
Pilot Project 100MW CSP Project
Under operation

100MW

Phase 3

Qinghai Province CSP Demonstration (Pilot) Project FIT

China's CSP industry will achieve rapid cost reduction through technological advancements and economies of scale, ultimately reaching self-sustaining profitability via electricity market trading.

Cosin Solar Golmud 350MW
CT CSP project

350MW

SUPCON SOLAR DELINGHA 50MW MOLTEN SALT TOWER CSP PLANT

The Plant entirely independently developed, designed, and constructed by Cosin Solar. As one of China's first CSP demonstration projects, the Plant fully employs the molten salt tower CSP technology independently developed by Cosin Solar, with over 95% of its equipment sourced domestically.

SUPCON SOLAR Delingha 50MW Molten Salt Tower CSP Plant

Recently, the Plant entirely independently developed, designed, and constructed by Cosin Solar, **was honored with the inaugural "SolarPACES-ES 2025 Technology Application Award,"** becoming the sole recipient of this award. The Plant won unanimous recognition from the SolarPACES awards committee for its advanced technology, long-term stable operation, and outstanding performance.



Project Operation Performance

The Plant is one of China's first batch of CSP Demonstration Projects, entitled as National Strategic and Emerging Industry Key Project by NDRC. Located in Delingha, Qinghai Province, with a 50MW capacity, 7-hour molten salt storage and 27,135 sets of 20m² heliostat, its designed annual output is 146GWh. By saving 46,000 tons of standard coal and reducing 121,000 tons of CO₂ emission, it creates enormous economic and social benefits.

- In its first full year of commercial operation, the Plant generated 122GWh of electricity, **setting the highest level among similar global plants during the same period.**
- In 2022, it generated 146.4GWh, reaching 100.26% of its annual designed output and **becoming the world's first tower molten salt CSP plant to exceed its design power generation.**
- In 2023, it generated 152.4GWh, achieving 104.38% of its annual target. As of Dec. 31, 2024, **the Plant has exceeded its designed annual power generation for three consecutive years,** with an average rate of 100.2%.
- The Plant has been validated through a comprehensive technical assessment by the independent German engineering consultancy Fichtner, **which confirmed that its technology has reached the most advanced level among similar global projects.**

JINTA ZHONGGUANG 100MW CSP PROJECT

The project will utilize Cosin Solar's entirely self-developed core molten salt tower CSP technology. Cosin Solar will be responsible for the whole process management of the project, including project management, overall plant process design (excluding Power Block), supply of core system equipment, commissioning, operation & maintenance (O&M), and other technical services.

100MW Jinta ZhongGuang Solar 'CSP + PV' Pilot Project 100MW CSP Project

The Plant is part of China's second batch of large-scale renewable energy base projects focused on deserts, Gobi areas, and arid regions. Located in Jinta, Gansu Province, it has a total installed capacity of 700MW, configured as 600MW PV and 100MW CT CSP, equipped with 8-hour molten salt thermal energy storage system and a heliostat field covering 767,800 square meters, its designed annual output is 1450GWh. By saving 480,000 tons of standard coal and reducing 1,360,000 tons of CO₂ emissions each year.



Project Operation Performance

- On March 30, 2025, the Plant began reverse power transmission, and salt melting commenced.
- On May 28, 2025, the Plant was successfully connected to the grid and began generating electricity.
- On July 10, 2025, the Plant achieved full-process operation.
- On July 21, 2025, the Plant reached full-load operation, culminating in a daily generation of 1024 MWh.
- During the period from July 24 to 29, 2025, the Plant operated continuously for 128 hours without shutdown, accumulating a total power generation of 4612.8 MWh.
- On August 14, 2025, the Plant's daily power generation reached 1317 MWh, setting a new operational record for similar power stations during the same period after commissioning.

The Plant successfully implemented several innovative technologies:

- Molten Salt Thermal Storage System Based on Low-Position Tank Short-Shaft Pumps
- Optimized Large-Scale Heliostat Field Control Technology
- Medium/High-Voltage Molten Salt Electric Heaters

COSIN SOLAR GOLMUD 350MW TOWER CSP PROJECT

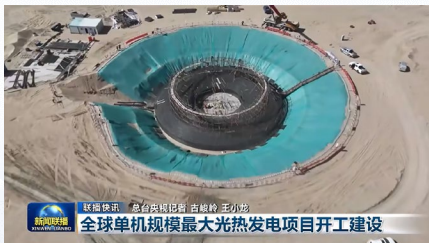
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350MW

Cosin Solar Golmud 350MW Tower CSP Project

On Oct. 16, 2025, the commencement ceremony for the Project was grandly held in the Wutumeiren Solar Park, Golmud City, Haixi Mongol and Tibetan Autonomous Prefecture, Qinghai Province.

The event attracted extensive coverage from multiple official media outlets, including CCTV News, Science and Technology Daily, and Economic Daily and so on.



Unit Capacity Leaps to 350MW Class with Multiple Major Technological Innovations

The project is the **world's largest single-unit solar thermal power project in terms of installed capacity, heliostat field reflective area, energy storage scale, and designed annual power generation.**

The project adopts a 'three-tower-one-unit' design scheme, configured with a 14-hour molten salt energy storage system. The total reflective area of the heliostat field is 3.3 million square meters. Facing the technical challenges of ultra-large-scale concentrating solar collector systems and Molten Salt Thermal Storage & Exchange System, Cosin Solar has innovatively developed multiple core Tower CSP technologies:

- **Ultra-Large-Scale, Intelligent Concentrating Solar Collector System**
 - a. Heliostat and Field Control System Technology Upgrade
 - b. High-Capacity, Safe, and Efficient Molten Salt Receiver Technology
- **High-Reliability, Distributed Multi-Tank Molten Salt Thermal Energy Storage System**
 - a. Distributed Molten Salt Energy Storage System Solution
 - b. Low-Position Tank Short-Shaft Pump Technical Solution
- **Highly Intelligent CSP Plant Smart Operation System**
 - a. CSP Plant Simulation Training Platform
 - b. Intelligent Operation System for Concentrating Solar Collector System
 - c. Smart Management Platform for CSP Plant Operation

[Read More](#)

A large, modern building with a distinctive facade of vertical, slanted metal panels. The building is covered in large, red, three-dimensional characters that read "CosinSolar" and "可胜技术" (Kesheng Technology). The building is set against a clear blue sky with some light clouds. In the background, other city buildings and a construction crane are visible.

CosinSolar
可胜技术

ABOUT COSIN SOLAR

- New Journey, New Momentum | Cosin Solar Relocates to New Headquarters
- Cosin Solar Ranked Among Zhejiang's Top 100 Fastest-Growing Enterprises in 2025
- Cosin Solar Selected Among "Top 10 Most Promising Scientist-Led Startups for Investment in 2025"

New Journey, New Momentum Cosin Solar Relocates to New Headquarters

On September 27, 2025, Cosin Solar Technology Co., Ltd. celebrated the relocation to its new headquarters and its 15th anniversary in Hangzhou. Nearly a hundred industry experts, partners, financial institution representatives, board members, shareholders, and guests from the construction units gathered with the company's leadership and employees to commemorate this significant milestone, which honored past achievements and ushered in a new chapter for the future.



Since its founding in 2010, Cosin Solar has consistently adhered to the belief of driving the green energy transition through technological innovation. By focusing intensely on tower-based CSP and molten salt thermal energy storage, we have established numerous industry benchmarks and set multiple records.



After fifteen years of steady growth, Cosin Solar has evolved into a globally leading provider of integrated CSP and molten salt storage solutions, building comprehensive capabilities that span the entire industry chain from R&D and equipment manufacturing to engineering, construction, and operational maintenance.

IMPORTANT NOTICE

Cosin Solar Technology Co., Ltd. has officially relocated to its new headquarters. To ensure smooth business communication and cooperation in the future, please kindly update our contact information as follows:



Cosin Solar Building, No. 118, Xinke Street, Qiantang District, Hangzhou, Zhejiang Province, China.



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We remain committed to our vision of 'To Provide Safe , Economical and Green Energy' and will continue striving to establish the company as a globally leading and trusted benchmark enterprise in the solar thermal sector. We warmly welcome all clients and partners to visit Cosin Solar's new headquarters to strengthen our collaboration and jointly explore new opportunities for development!



To Provide Safe, Economical and Green Energy

CosinSolar

- Founded in 2010, focus on tower CSP and energy storage technology
- Independent R&D with fully patented technology and homebred equipment
- Technology consultancy, equipment integration, engineering services, etc
- Development, investment, construction, commissioning, operation of projects, etc



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