

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



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

Levelized Cost of Electricity for

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.

Golmud 350MW CT CSP project

Oinghai Province CSP Demonstra-





- The First CSP Plant in China which Exceeded the Designed Production
- The Production Target has been Achieved for Three Years

By the end of 2024, the plant had maintained an average annual power generation at 100.2% of its design value for three consecutive years.

Marchael International Certification

The design of the plant corresponds to state-of-the-art design of similar plants in the world.

Maximum annual power generation

daximum monthly generation (18.4358 GWh

Cumulative power generation as of December 2024

Continuous operation for 322.62 hours,
Power generation of 9.1955 GWh,
Average production at 111.5%

Maximum single day generation
1128.6 MWh

152.4 GWh

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

At 18:25 on May 28, 2025, the Jinta ZhongGuang Solar 'CSP + PV' Pilot Project 100MW CSP Project (the 'Project') , developed by Cosin Solar, was successfully connected to the grid.

The Project is part of China's second batch of large-scale wind and solar power base projects focused on desert, Gobi, and barren land. Located in Jinta County, Jiuquan City, it has a total installed capacity of 700MW and adopts a "CSP+" hybrid configuration—600MW of PV and 100MW of CT CSP, equipped with a 9-hour molten salt thermal energy storage system.





Project Highlights

The Project adopts a complementary power generation technology combining CSP and PV, achieving efficient coordination and deep integration between different energy sources.

The Project uses solar thermal tower technology fully developed by Cosin Solar, achieving innovative optimization in Concentrated Solar Collector System and Molten Salt TESS&SGS System.

The Project marks the first application of Cosin Solar's patented low-position molten salt tank + short-shaft pump solution, increasing usable molten salt ratio from 85% to 90.3% while substantially reducing the design and manufacturing complexity of cold salt pumps. The technology notably improves operational reliability and maintenance accessibility of molten salt pumps, and has obtained patent authorizations in China and multiple countries worldwide. Additionally, the project's 20MW medium-high voltage molten salt electric heater can fully absorb curtailed PV power, enabling bidirectional and rapid peak-shaving functionality.



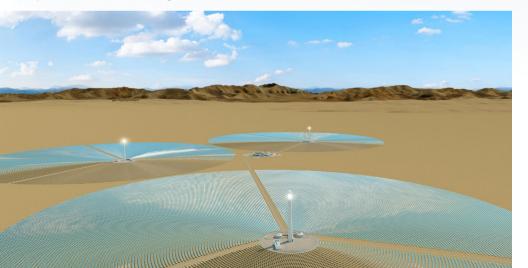




Qinghai Golmud 350MW Tower CSP Project

On April 24, the feasibility study report review meeting for the Qinghai Golmud 350MW Tower CSP Project (the 'Project'), developed by Cosin Solar, was successfully convened in Beijing.

The expert panel unanimously concluded that the project's preliminary research and demonstration work were thorough, the feasibility study report was comprehensive, and the technical solutions were scientifically sound, incorporating multiple innovative technologies.

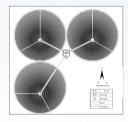




Project Highlights

The Project is the world's largest single-unit installed capacity project with the longest energy storage duration. It adopts a "three-tower-one-unit" design and is equipped with a 14-hour molten salt energy storage system.

The Project boasts the world's largest heliostats field reflection area and thermal storage capacity.





It will utilize Cosin Solar' proprietary intelligent operation system for concentrated solar collectors, enabling one-click startup, heat collection, and salt drainage operations. This significantly reduces operational complexity for personnel while enhancing system reliability and power generation efficiency.

Additionally, the implementation of distributed thermal storage with molten salt transfer technology and an innovative low-level tank solution will substantially reduce overall thermal storage system costs.

The 12th China International CSP Conference 2025, co-organized by Cosin Solar, Successfully Concludes with Strong Industry Momentum

On May 28, the 12th China International CSP Conference & CSPPLAZA Annual Conference, co-hosted by CSPPLAZA and Cosin Solar Technology Co.,Ltd., was grandly held in Hangzhou, Zhejiang. The event attracted approximately 900 representatives from domestic and international attendees, with around 70 exhibitors participating.

During the conference, Mr. Jin Jianxiang, Chairman and Chief Scientist of Cosin Solar, delivered a keynote speech entitled "Strategies for CSP Amid Electricity Market Reform," providing a detailed analysis of the opportunities and challenges for concentrated solar power within the evolving electricity market landscape.

He stated that CSP can achieve higher returns than other renewable energy sources in the electricity market through the time value of electricity generation, operational flexibility, reliability, and grid security/stability.

At the parallel forums, multiple technical experts from Cosin Solar shared specialized insights and engaged in in-depth discussions with industry peers, offering valuable experience references for sector development.



Cosin Solar Wins Two Prestigious Awards at CSPPLAZA AWARDS 2025

During the conference, the CSPPLAZA AWARDS 2025 ceremony took place, where Cosin Solar was honored with two major awards: the 'Outstanding Contribution Award' and the 'Industrial Innovation Award', underscoring its industry leadership and widespread recognition.

The CSPPLAZA AWARDS 2025 featured three categories: 'Outstanding Contribution Award', 'Industrial Innovation Award' and 'Multi-Scenario Application Award.' The winners were determined after a rigorous review by the selection committee and a public vote.



Citation for the Outstanding Contribution Award

By the end of 2024, Cosin Solar had achieved a cumulative CSP capacity of 1.36GW, securing a domestic market share of 50.75%. It stands as the world's only Tower CSP technology provider with a track record of over 1GW.

During the integrated project development phase, Cosin Solar has earned the trust of major state-owned power enterprises, including PowerChina, Energy China, and CGN, thanks to its profound technical expertise. Currently, over ten 'CSP+' integrated projects are under construction in Qinghai, Gansu, Xinjiang, and other regions, with a total capacity of 1.25GW. Additionally, the company is developing a 350MW standalone CSP plant. For instance, the 350MW tower CSP project in Golmud, Qinghai, developed by Cosin Solar, has achieved an electricity price of 0.55 yuan/kWh, a reduction of over 50% compared to the 1.15 yuan/kWh price of the first batch of demonstration projects.

Citation for the Industrial Innovation Award

From its small-scale test base in Hangzhou to the 10MW CSP plant in Delingha, and from the first batch of demonstration projects to the 350MW large-capacity standalone CSP demonstration plant, Cosin Solar has continuously refined its technical and practical solutions. The company holds 242 valid patents and 59 software copyrights, having overcome key technologies such as high-precision large-scale heliostat automatic aiming, grid-based energy coordination control for high-temperature receivers, large-capacity safe energy storage and rapid load adjustment, and 350MW-level multi-tower single-unit technology.





Qinhai, China

• CGN New Energy Delingha 1GW Hybric Project (200MW CT CSP)

Until the end of June 2025, 21,529 Sets of heliostats have been installed.

- 2 CTGR Qingyu DC 100MW CSP Project The project has achieved full-capacity grid synchronization.
- 3 CHN Energy Qinghai Qingyu DC 100MW CSP Project Until the end of June 2025, all 23,340 sets of heliostats were assembled.







Xinjiang, China

 ENERGY CHINA ZTPC Xinjiang Turpan CSP + PV Integrated Project (100MW CT CSP)

The project has achieved full-capacity grid synchronization.

SPIC Xinjiang Turpan Shanshan Qiketai 100MW CSP Project

The project has achieved full-capacity grid synchronization.

3 ENERGY CHINA Hami 150MW CT CSP

Until the end of June 2025, 5,227 sets of heliostats were assembled.

POWERCHINA Turpan City Tuokexun County CSP
 + PV Integrated Project (100MW CT CSP)

Until the end of June 2025, 12,568 sets of heliostats have been installed.

S Luneng Fukang Hybrid Project 100MW CSP Project

Until the end of June 2025, 4,450 sets of heliostats were assembled, and the tower has reached 154.5 meters.



Jilin, China

• CGN New Energy Jixilugu DC 490MW Hybrid Project (100MW CT CSP)

Until the end of June 2025, 15,252 Sets of heliostats have been installed.

2 SPIC Jixi Base Jixilugu DC 1.4GW Hybrid Project Unit 1 100MW CSP

Until the end of June 2025, 13,020 sets of heliostats have been installed.





WHO WE ARE >>>

Global Leading Provider for Molten Salt Tower CSP

Cosin Solar Technology Co., Ltd. ("Cosin Solar"), was founded in 2010, headquartered in Hangzhou, China. As one of the pioneer and leading enterprises in China devoted in the promotion of research and industrialization of CSP technology, we are now specialized in the application of CSP, CSP+ hybrid solution and molten salt thermal energy storage technologies. We are able to provide our customers with advanced, mature, and cost-competitive CSP and molten salt energy storage products and solutions.

15_{Years}

Continuous Research

117_{Million USD}

R&D Investment

2

Business Domain

No.1

Market share in China (*CT CSP Businee)

BUSINESS DOMAIN ,,,

Cosin Solar is driven by scientific and technological innovation and has established two major business segments.



MSES MSES-Based Integrated Energy Solution Industrial Waste Heat Utilization • Green Heat Supply/CHP Supply in Industrial and Commercial Parks • Carnot Battery Of Coal-Fired Power Plants • Energy Storage Services For PV & Wind Power Plants

Integrated Solution for Tower CSP >>>





UPCOMING EVENTS

China Solar Thermal Power Conference 2025



SolarPACES 2025





Aug 12—15th, 2025



Xian, China



The meeting is jointly hosted by Cosin Solar.





Sept. 23—26th, 2025



Almería, Spain



Cosin Solar will attend the meeting.



CONFERENCE INVITATION: We sincerely welcome all the friends from the industry to attend the conference.



- The former SUPCON SOLAR, officially renamed into Cosin Solar Technology Co., Ltd. ("Cosin Solar" for short) in July 2021
- 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





