



*To Provide Low-cost, High-quality, and Clean Energy!*

# QUARTERLY UPDATE

Q2. 2023



# WHO WE ARE

Cosin Solar Technology Co., Ltd. ("Cosin Solar"), formerly known as Supcon Solar, was founded in 2010 with its headquarter in Hangzhou, China. As one of the pioneer and leading enterprise 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.

## R&D Strength

13 Years

13 Continuous Research

117 Million USD

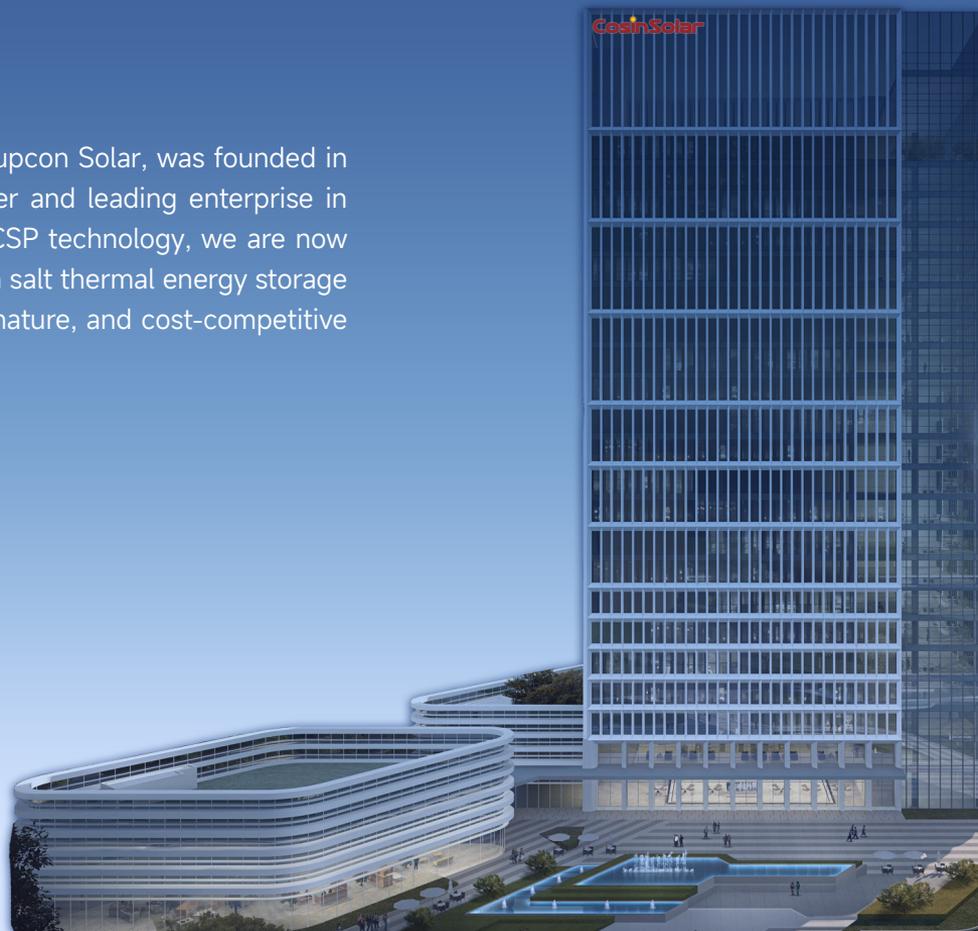
R&D Investment

334

Patents

31

Standards



# WHAT DO WE DO

**TO PROVIDE LOW-COST,  
HIGH-QUALITY, AND CLEAN ENERGY!**



**Total Solution of Molten Salt Tower CSP**



**Integrated Energy Solution Based on MSES**



**Comprehensive Solution for Smart PV Tracking System**

# Total Solution of Molten Salt Tower CSP

Extensive experience in construction and operation of large-scale commercial tower CSP plants



In 2013, we independently developed and constructed Supcon Solar Delingha 10MW Tower CSP Project, which has been running stably for 10+ years.



In 2016, we independently developed and constructed the Supcon Solar 50MW Tower CSP Project of which the performance has repeatedly broken industry records after the grid connection on December 30, 2018.



In 2018, we participated in the construction of POWERCHINA Gonghe 50MW Tower CSP Project as the technology supplier and equipment supplier of solar field, which was connected to the grid in September 2019.

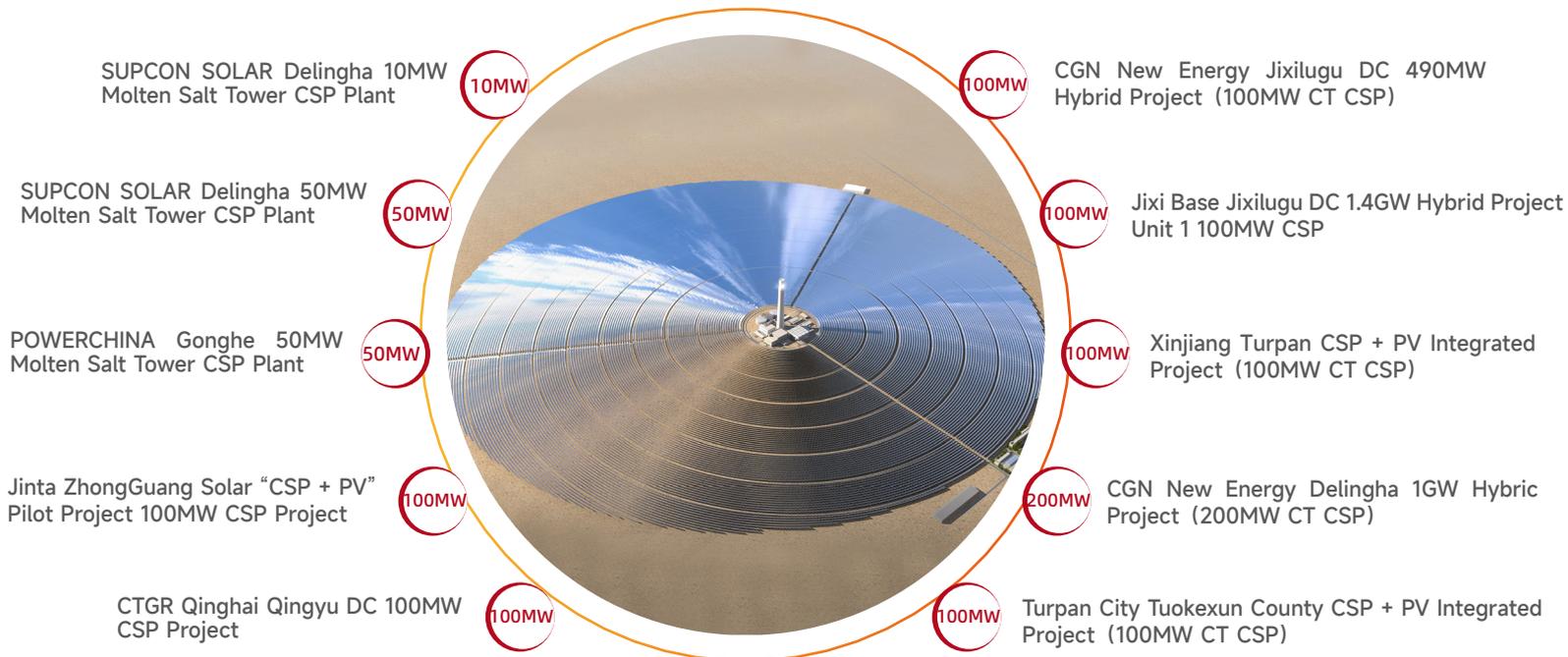


In 2022, we constructed Jinta ZhongGuang Solar "CSP + PV" Pilot Project, which adopts the 'CSP+' configuration. The tower of the project reached the top in November 2022.

**910MW** TOWER CSP  
Installed capacity

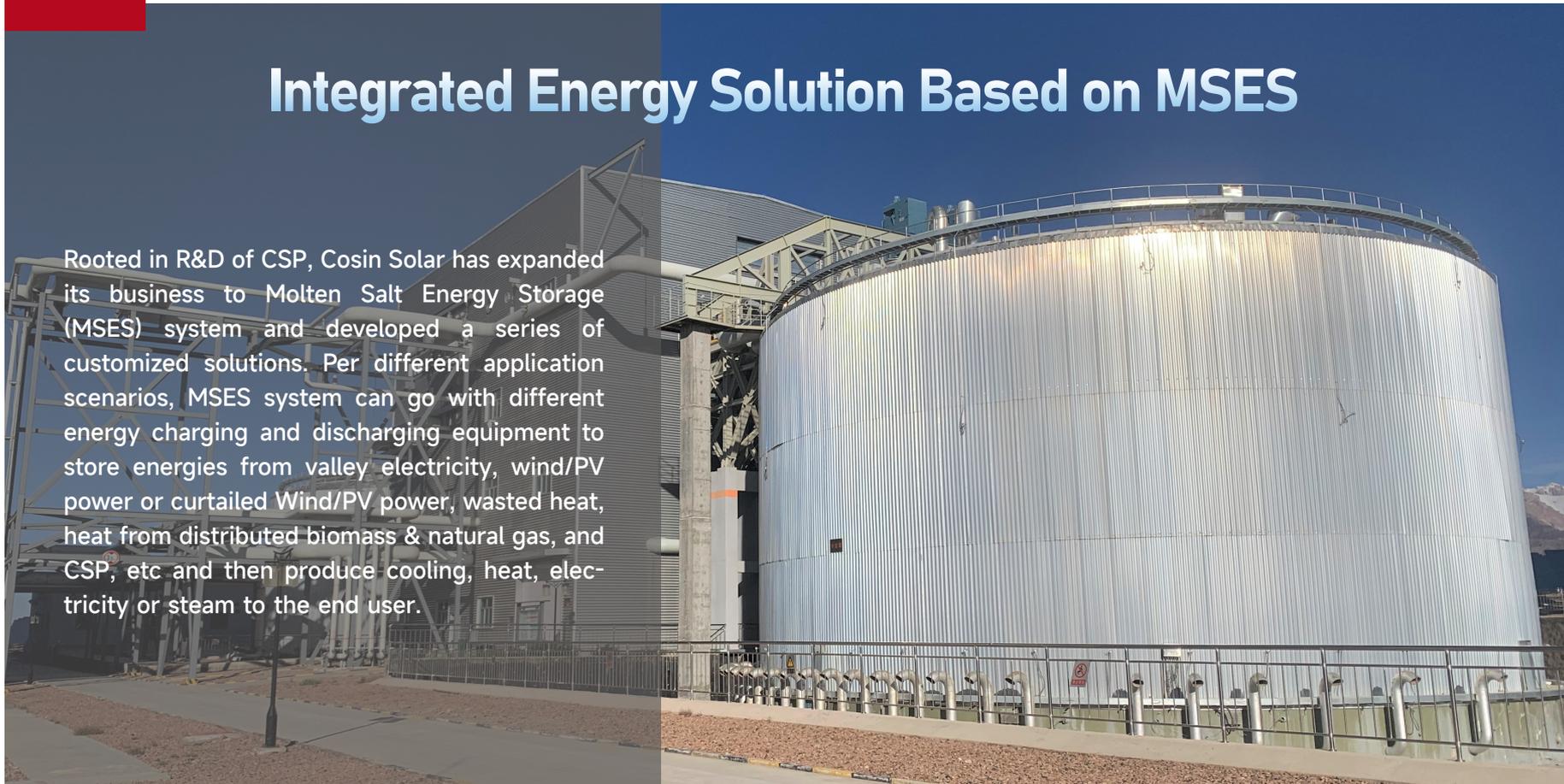
# PROJECT REFERENCE >>>

In Cosin Solar we promote engineering application of core CSP technologies and equipment. We have created multiple industry benchmarks through construction and operation of our 110MW CSP projects. So far, our CSP projects under construction has reached 800MW, widely distributed in Qinghai, Gansu, Xinjiang, Jilin and other provinces of China.



# Integrated Energy Solution Based on MSES

Rooted in R&D of CSP, Cosin Solar has expanded its business to Molten Salt Energy Storage (MSES) system and developed a series of customized solutions. Per different application scenarios, MSES system can go with different energy charging and discharging equipment to store energies from valley electricity, wind/PV power or curtailed Wind/PV power, wasted heat, heat from distributed biomass & natural gas, and CSP, etc and then produce cooling, heat, electricity or steam to the end user.



# APPLICATION SCENARIOS >>>



## Integrated Energy Services

- Multi-energy hybridization power supply for Industrial Park
- Cooling and heating supply to residential and commercial areas



## Flexibility Upgrade of Coal-fired Power

- Flexibility Upgrade of existing Coal-fired Power Plant
- Flexibility Upgrade of the Decommissioned Coal-fired Power Plant

## PV Wind Power Park Energy Storage

- MSES can provide energy storage and peak regulation services for large scale Wind and PV power plant.

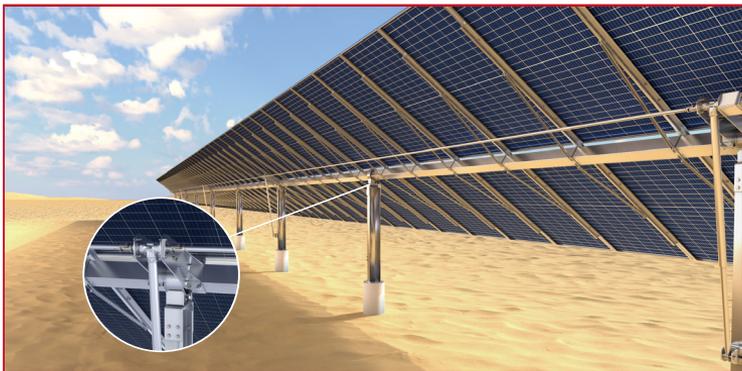


# Comprehensive Solution for Smart PV Tracking System

Thanks to 10+ years of experience in independently designing, developing, manufacturing, and operating high-precision intelligent tracking products, Cosin Solar has actively expanded and extended the industrial chain, carried out technological innovation, and successfully developed Cosin Solar PV tracking system well suited for harsh environmental conditions. The system has the advantages of high adaptability, high reliability, accurate tracking, stable operation, and easy installation & maintenance. Combined with the self-developed intelligent tracking algorithm, it can greatly increase PV power generation. What's more, it has been successfully applied in projects.



## 📌 Cosin Solar PT Tracking System



- The multi-point parallel drive design has more drive pylons, and the stress distribution of the frame is more uniform, suitable for harsh environmental conditions such as strong winds.
- Support mechanical or electrical synchronization hence a more uniform driving torque.
- With a hard limit mechanism inside the linear actuator, the overall hard limit and overload protection function is more reliable.
- Unique sealing design is applied on linear actuator. Grease lubrication is used hence no oil pollution and no risk of oil leakage.

## 📌 Cosin Solar PJ Tracking System



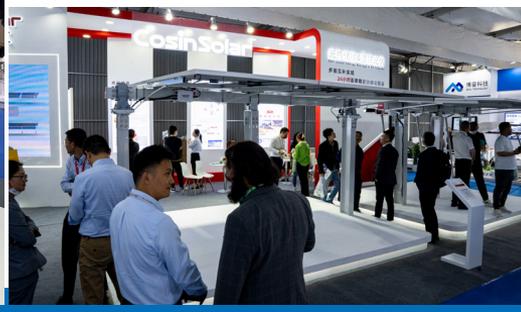
- Higher north-south slope adaptability, up to 20%, suitable for larger slope sites.
- The slew drive adopts a closed transmission with the worm gear transmitted in a fully lubricated sealed box unaffected by sand and dust, meaning better sand and dust adaptability.
- The slew drive can achieve 360-degree rotation, so the slew drive solution has a wider tracking angle range.

# NEWS IN BRIEF



## Cosin Solar Attended the SNEC 2023 PV POWER EXPO

On May 24, at the 16th (2023) International Solar Photovoltaic and Smart Energy (Shanghai) Exhibition ("SNEC"), the most influential PV event in the world, Cosin Solar released to the world its PV Tracking System, a new product based on high-precision intelligent tracking technology under the theme of "CSP-based Energy Storage & PV Tracker, Achieve 24-hour Continuous and Steady Green Power Supply".



Cosin Solar Attended the CSPPLAZA 10th Annual Conference



On June 12, the 2023 China International CSP Conference & CSP-PLAZA 10th Annual Conference was kicked off in Hangzhou, China. 1000+ people from the CSP industry attended. Mr. Jin Jianxiang, our Chairman and Chief Scientist, as the invited guest to attend the opening ceremony, delivered a keynote speech titled "For new energy base, how to balance performance and economic returns of Solar Thermal Power MSES Plant".



Xu Neng, President of Cosin Solar, participated in the panel discussion and shared the CSP experience



Yangyi, Manager of TD of Cosin Solar, give a keynote speech about MSES



# UPCOMING EVENTS



## China-Eurasia Expo | 2023 New Energy Cooperation Meeting



August 17—19th, 2023



Urumqi, China



Cosin Solar will attend the meeting



## SolarPACES 2023



October 10—13th, 2023



Sydney, Australia



Cosin Solar will attend the meeting



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



# CosinSolar

- 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



Youtube: Cosin Solar



Twitter: @CosinSolar



Website: [www.cosinsolar.com](http://www.cosinsolar.com)